

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 158 of 185

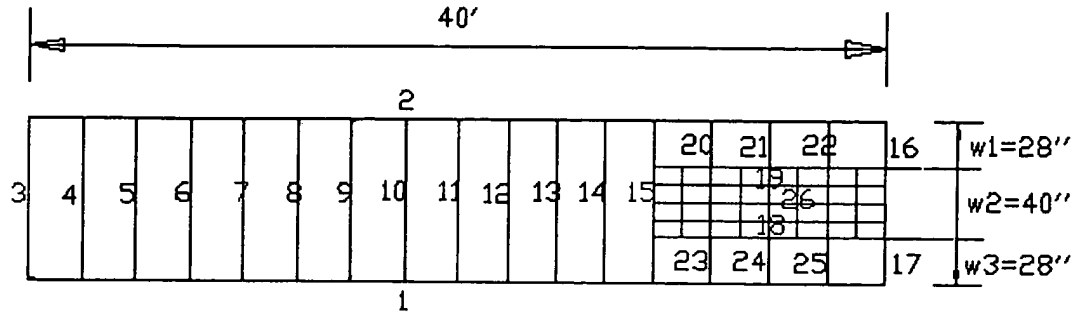


FIG. 64A/B: The floor frame panel structure model (40 foot and 40 foot high cube collapsible container)

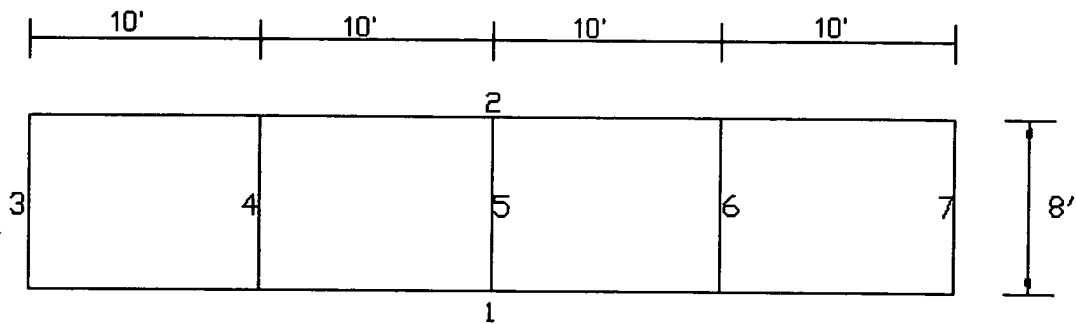


FIG. 65A/B: The ceiling frame panel structure model (40 foot and 40 foot high cube collapsible container)

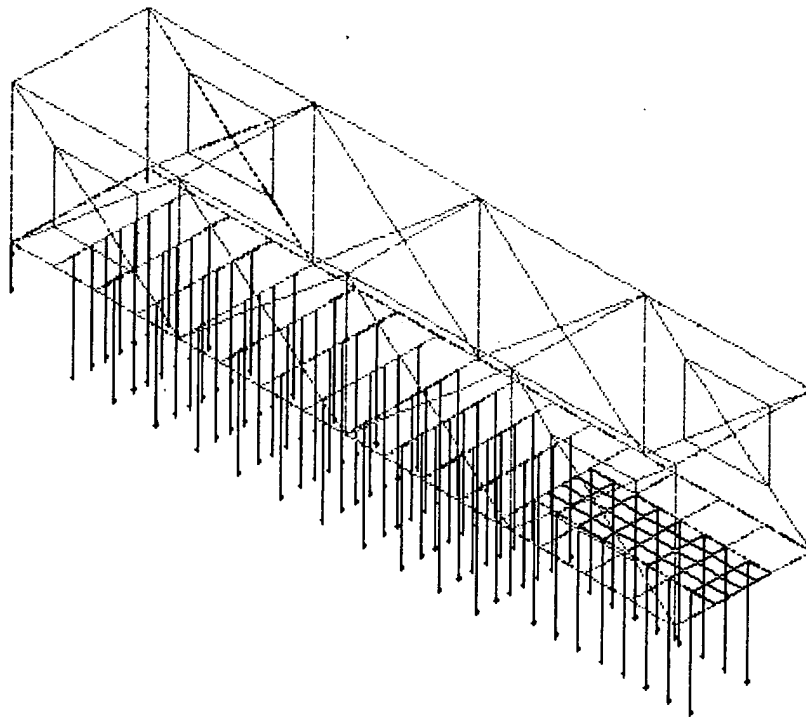


FIG. 66A/B: The frame panel structure load conditions (40 foot and 40 foot high cube collapsible container)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 159 of 185

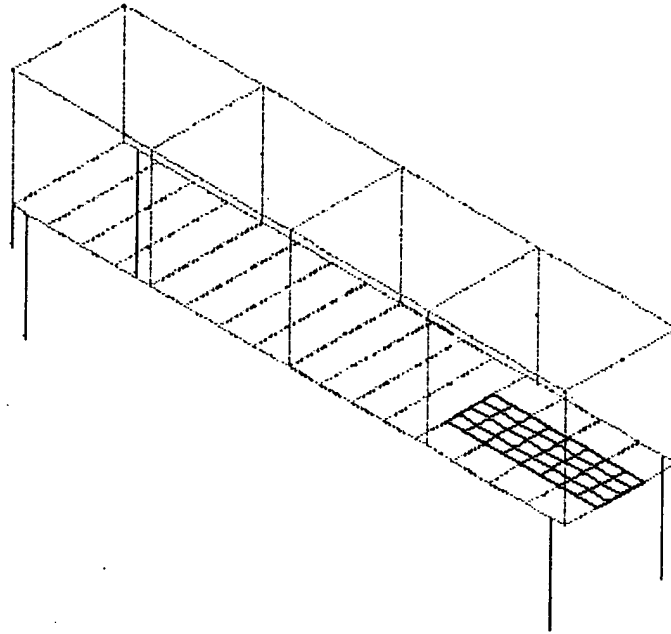


FIG. 67A/B: The weight load and the centralized load at the floor longitude beam corners (40 foot and 40 foot high cube collapsible container)

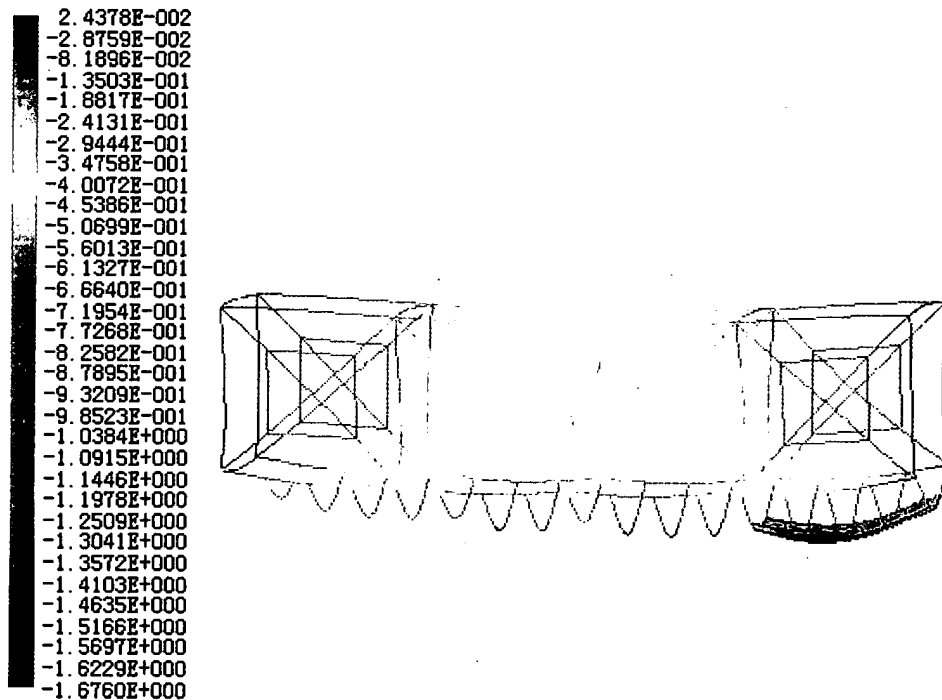


FIG. 68A: The structure deformation under 44,452 kg distributed load and 3,088 kg weight (40 foot collapsible container supported at the floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 160 of 185

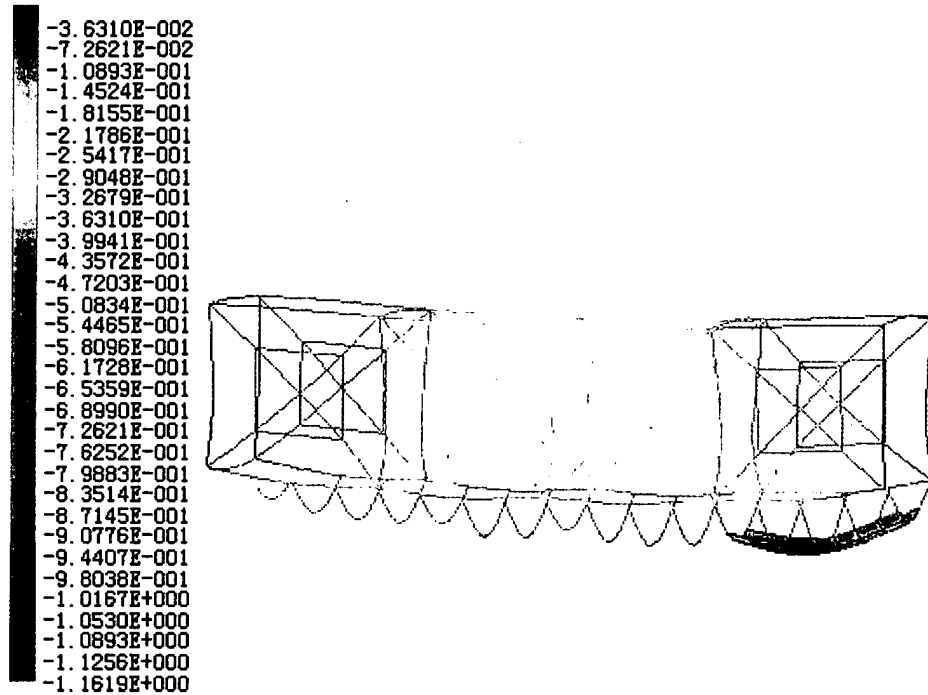


FIG. 69A: The structure deformation under 29,871 kg distributed load and 3,088 kg weight (40 foot collapsible container supported at the floor corners)

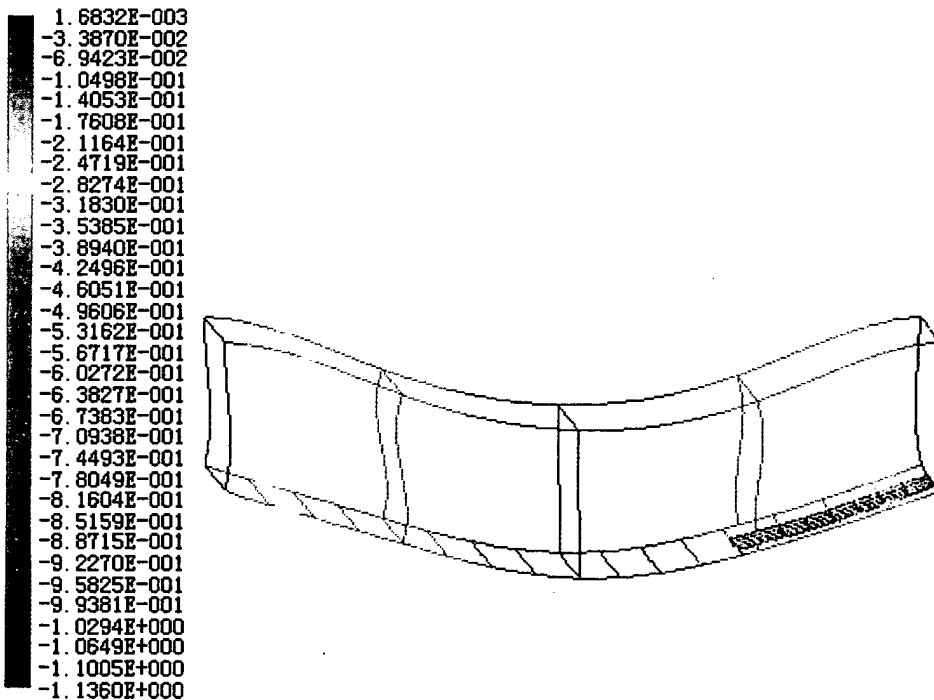


FIG. 70A: The structure deformation under 22,221 kg load at the floor corners and 3,088 kg weight load (40 foot collapsible container supported at the floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 161 of 185

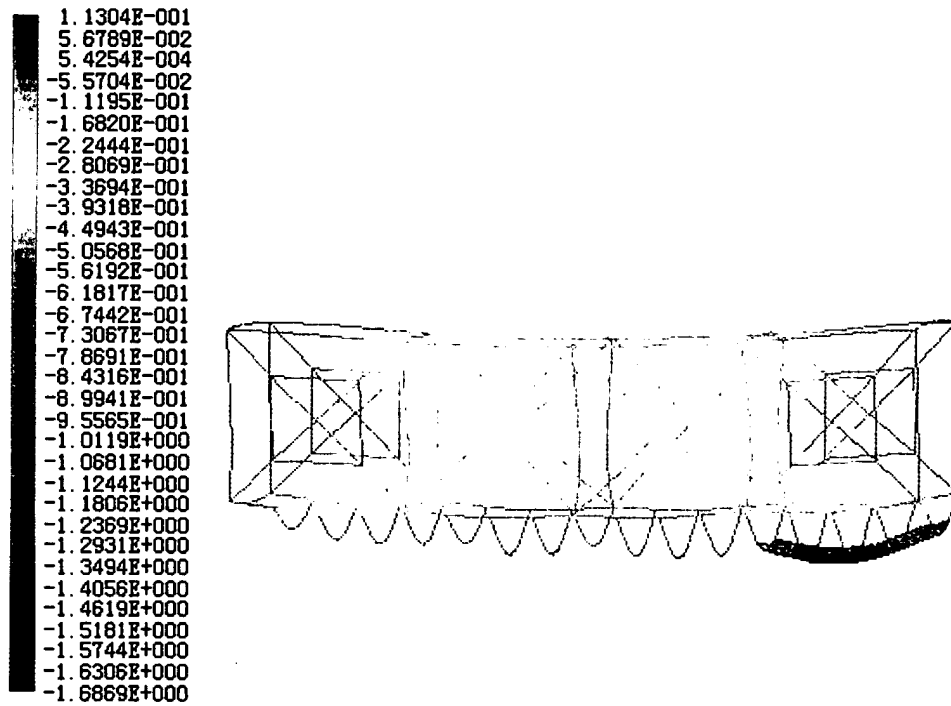


FIG. 71A: The structure deformation under 44,452 kg distributed load and 3,088 kg weight (40 foot collapsible container supported at the ceiling corners)

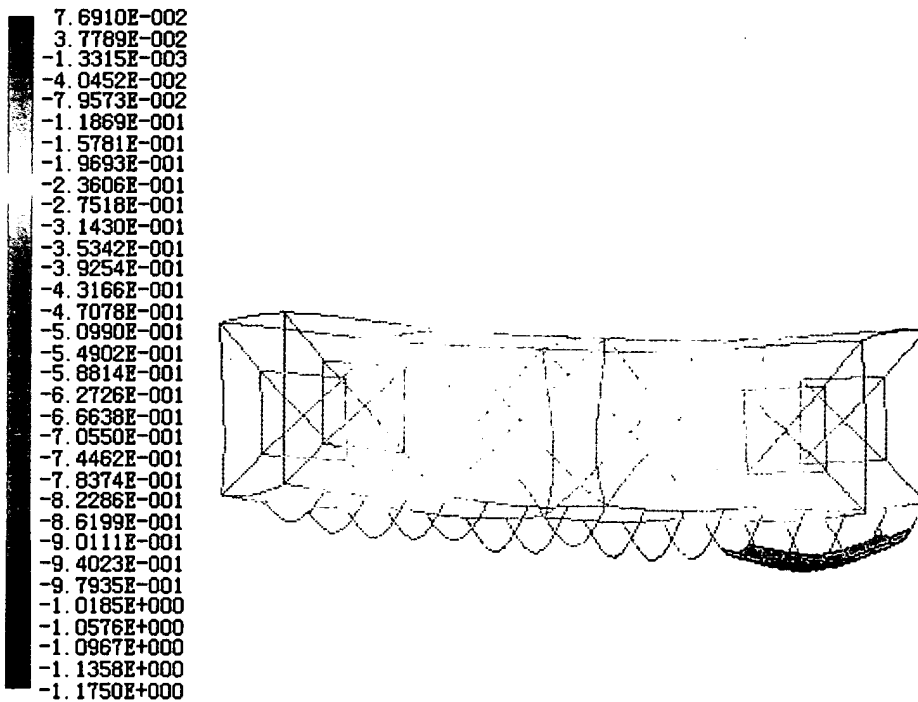


FIG. 72A: The structure deformation under 29,871 kg distributed load and 3,088 kg weight (40 foot collapsible container supported at the ceiling corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 162 of 185

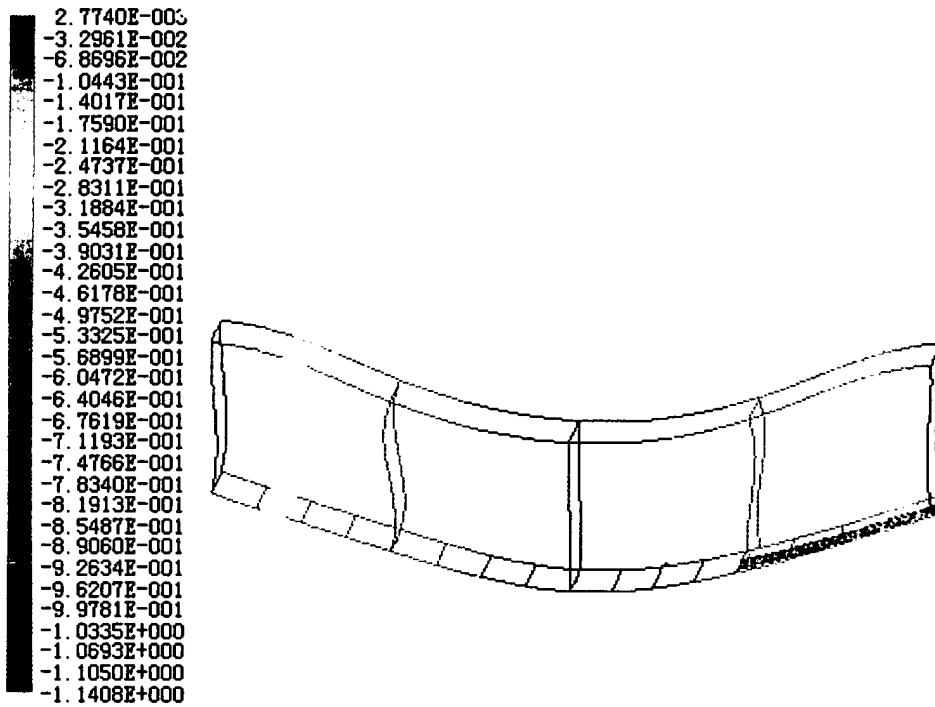


FIG. 73A: The structure deformation under 22,221 kg load at the four floor corners and 3,088 kg weight (40 foot collapsible container supported at the ceiling corners)

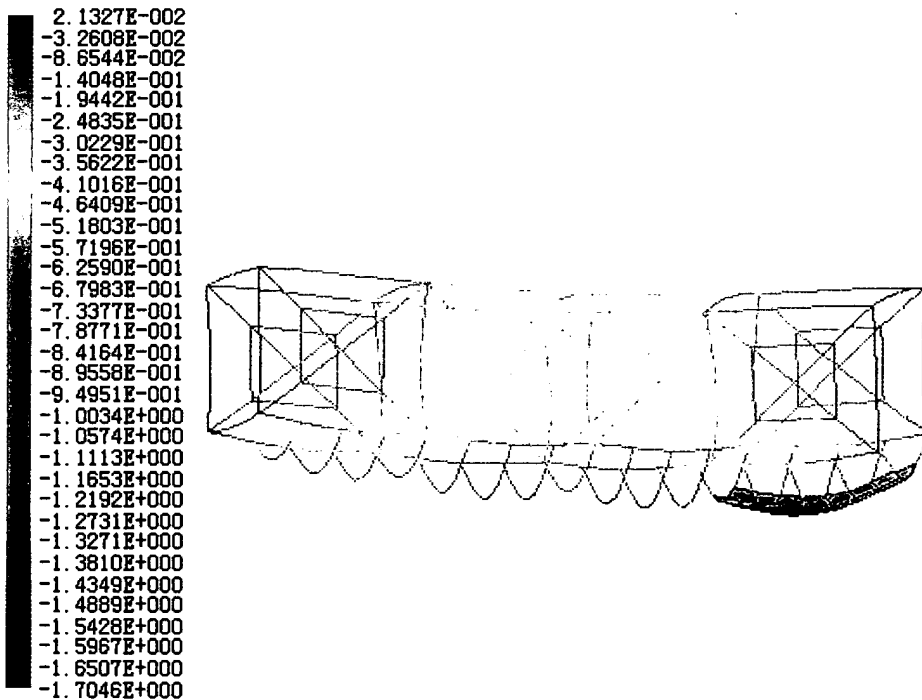


FIG. 68B: The structure deformation under 44,452 kg distributed load and 3,117 kg weight (40 foot collapsible container simply supported at the floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 163 of 185

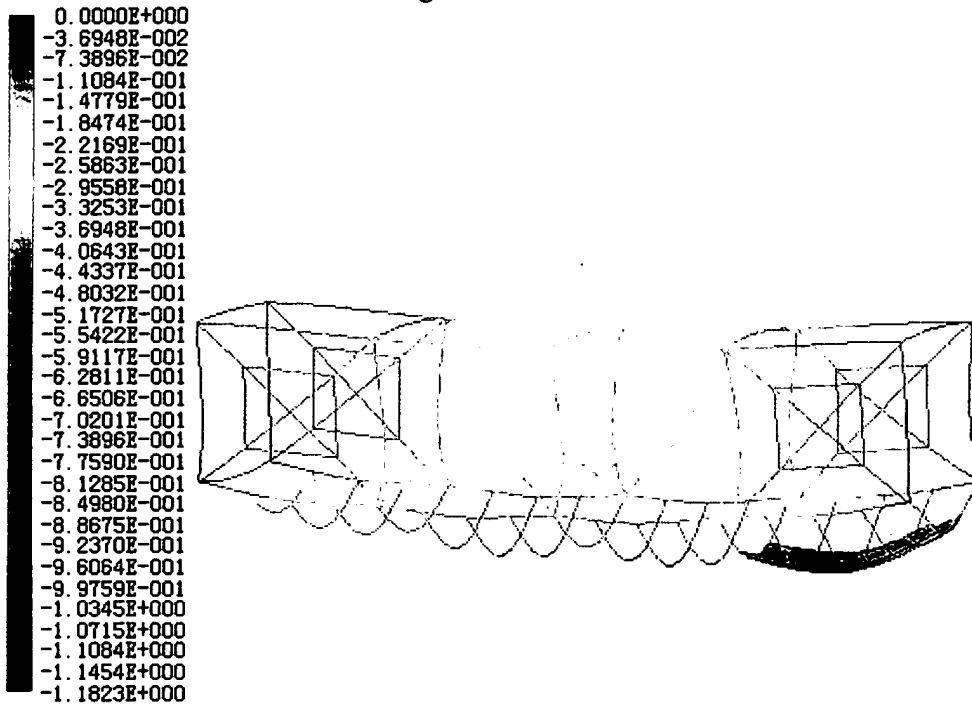


FIG. 69B: The 40 foot collapsible high cube container frame deformation under 29,871 distributed load and 3117kg weight (simply supported at the four floor corners)

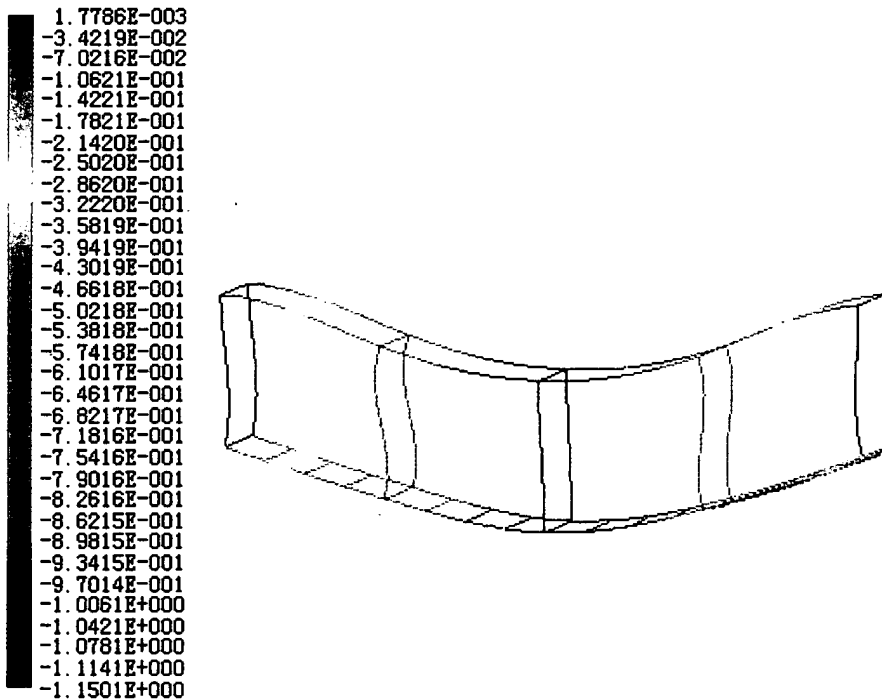


FIG. 70B: The 40 foot collapsible high cube container frame deformation under 22,221kg load at the four floor corners and 3117kg weight load (simply supported at the four floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 164 of 185

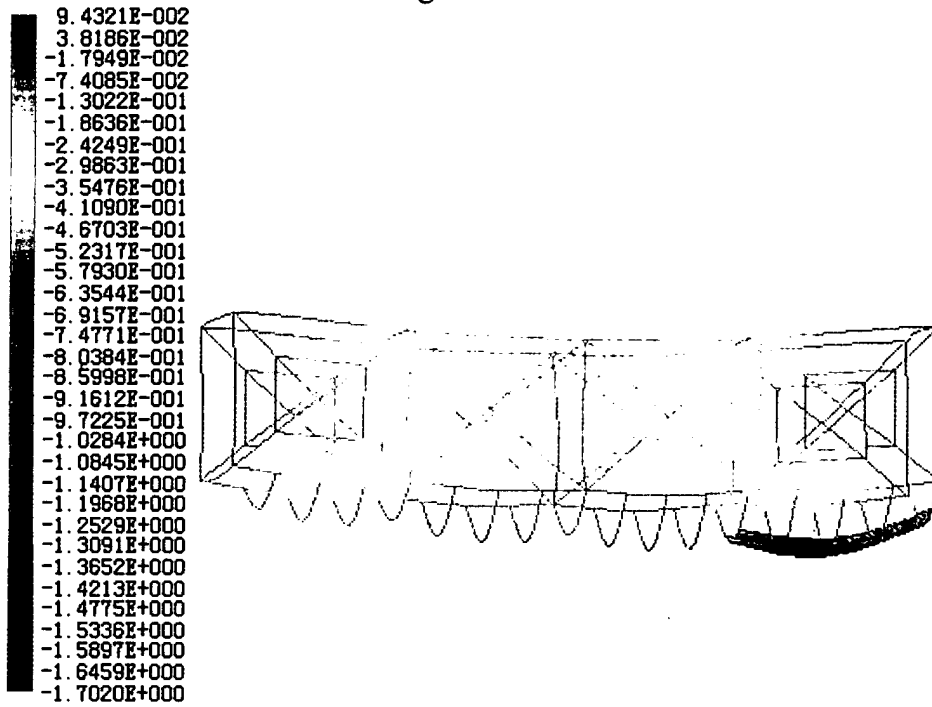


FIG. 71B: The 40 foot collapsible high cube container frame deformation under 44,452kg distributed load and 3117kg weight (simply supported at the four top corners)

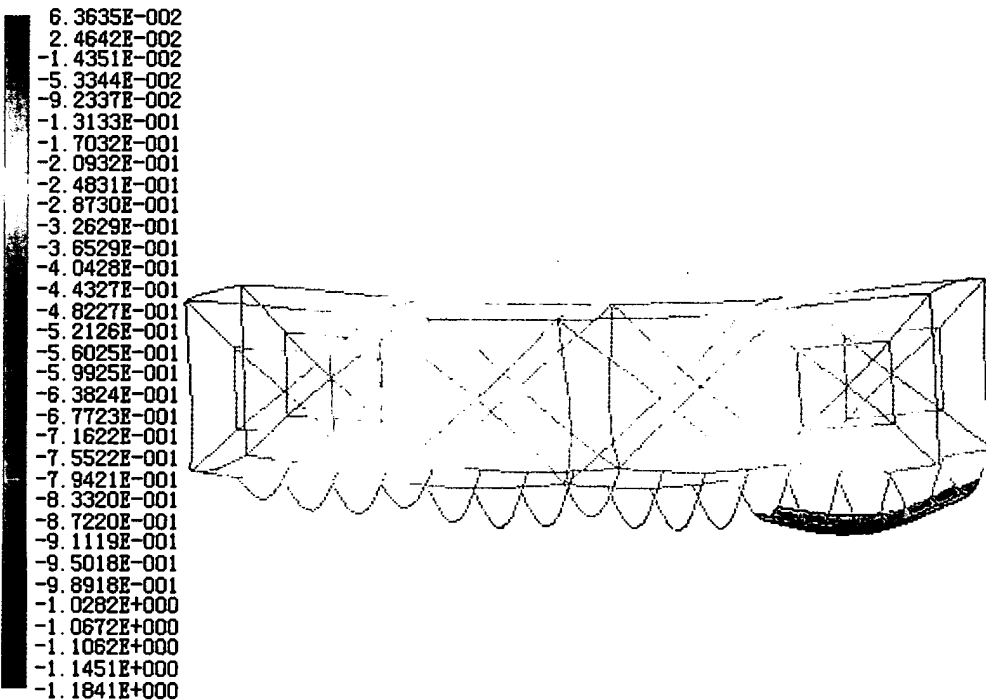


FIG. 72B: The 40 foot collapsible high cube container frame deformation under 29,871kg distributed load and 3117kg weight (simply supported at the four top corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 165 of 185

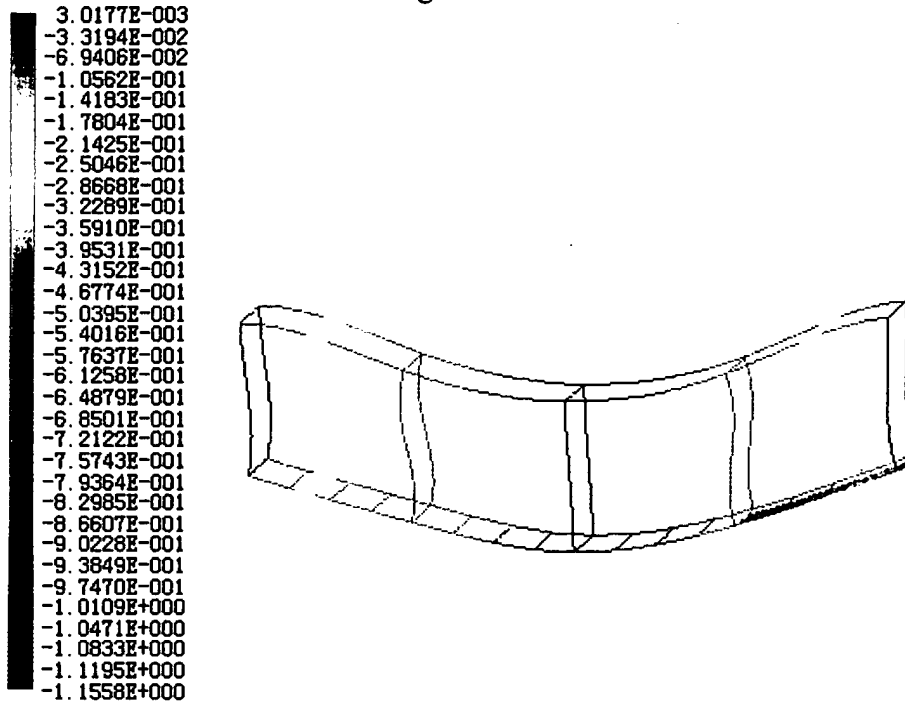


FIG. 73B: The 40 foot collapsible high cube container frame deformation under 22,221kg load at the four floor corners and 3117kg weight load (simply supported at the four top corners)

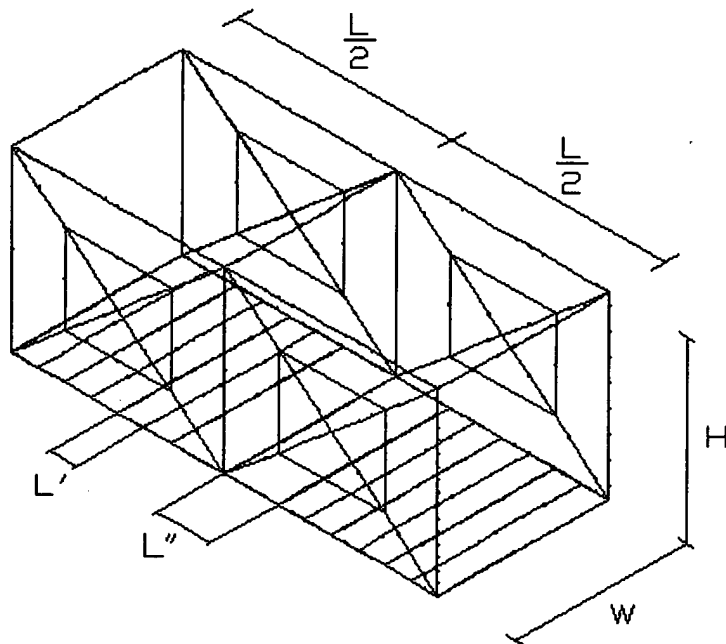


FIG. 58C/D: The frame panel structure model (20 foot and 20 foot high cube collapsible cargo container)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 168 of 185

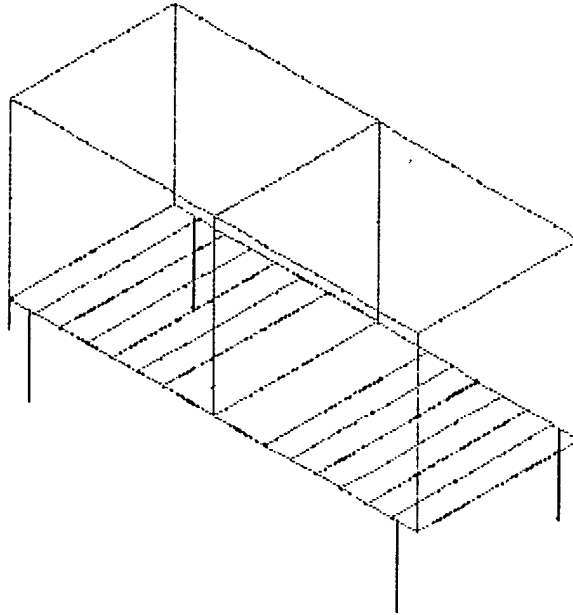


FIG. 67C/D: The container frame under a centralized load at the four floor beam corners and its weight load (20 foot and 20 foot high cube collapsible cargo container).

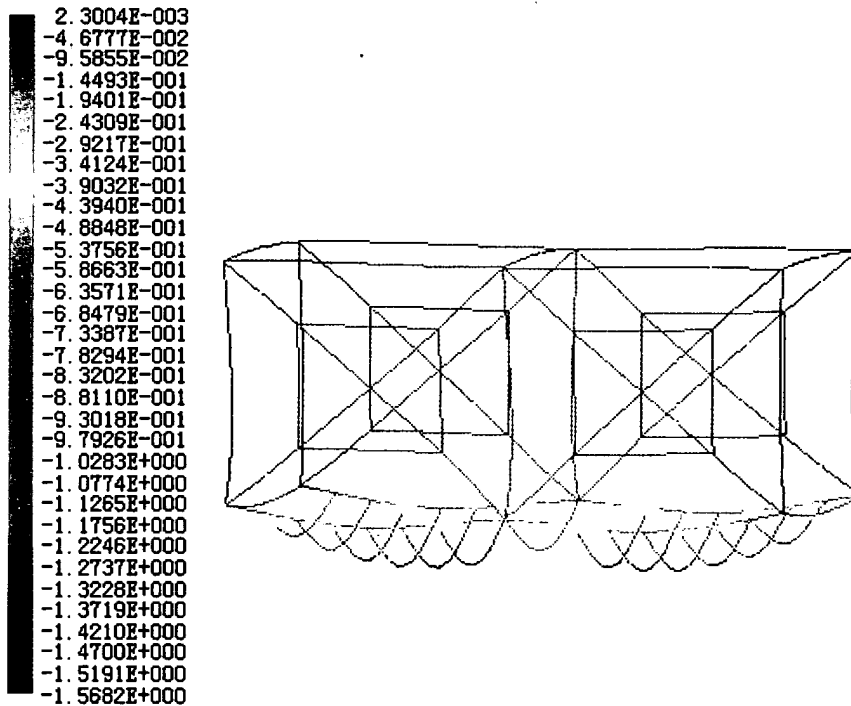


FIG. 68C: The 20 foot collapsible container frame deformation under 44,452kg distributed load and 1891kg weight (simply supported at the four floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 169 of 185

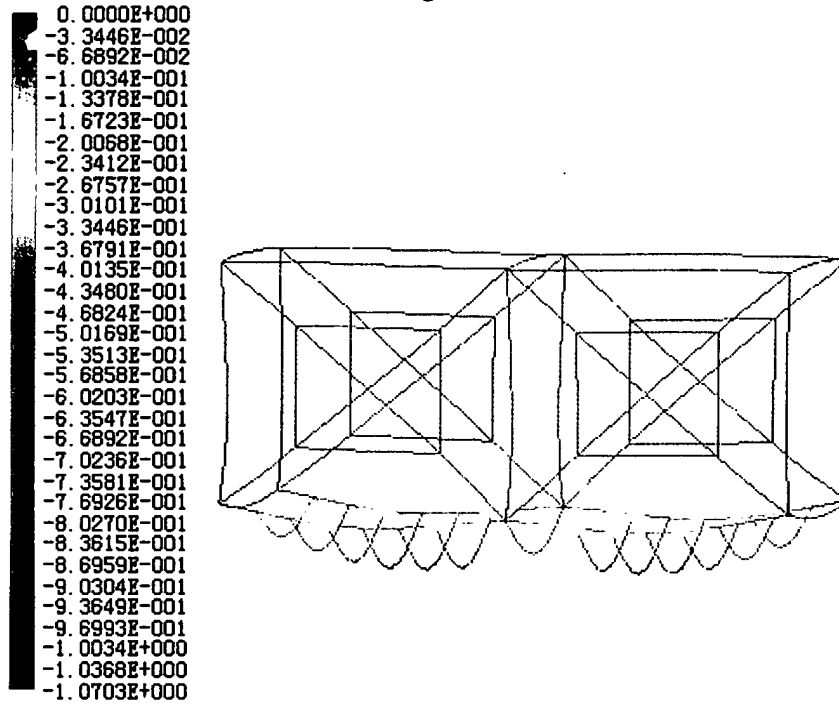


FIG. 69C: The 20 foot collapsible container frame deformation under 29,871 distributed load and 1891kg weight (supported at the four floor corners)

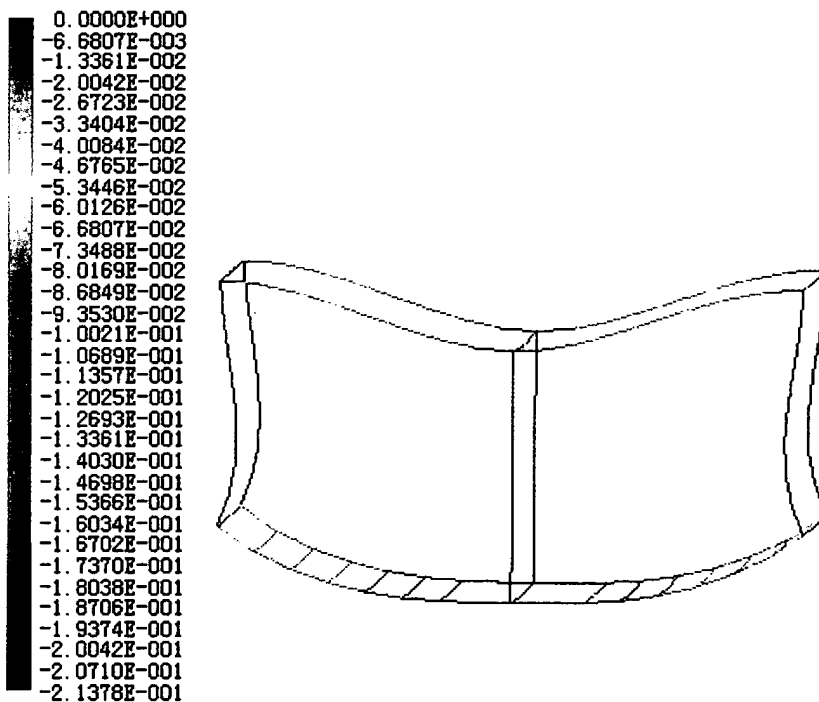


FIG. 70C: The container frame deformation under 22,221kg load at the four floor beam corners and 1891kg weight load (supported at the four floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 170 of 185

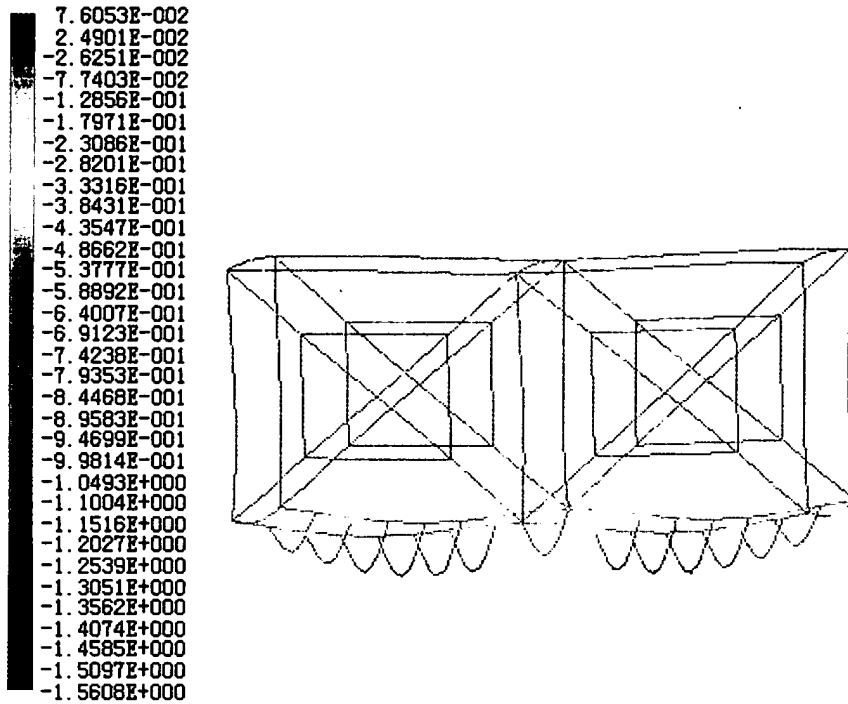


FIG. 71C: The 20 foot collapsible container frame deformation under 44,452kg distributed load and 1891kg weight (supported at the four top corners).

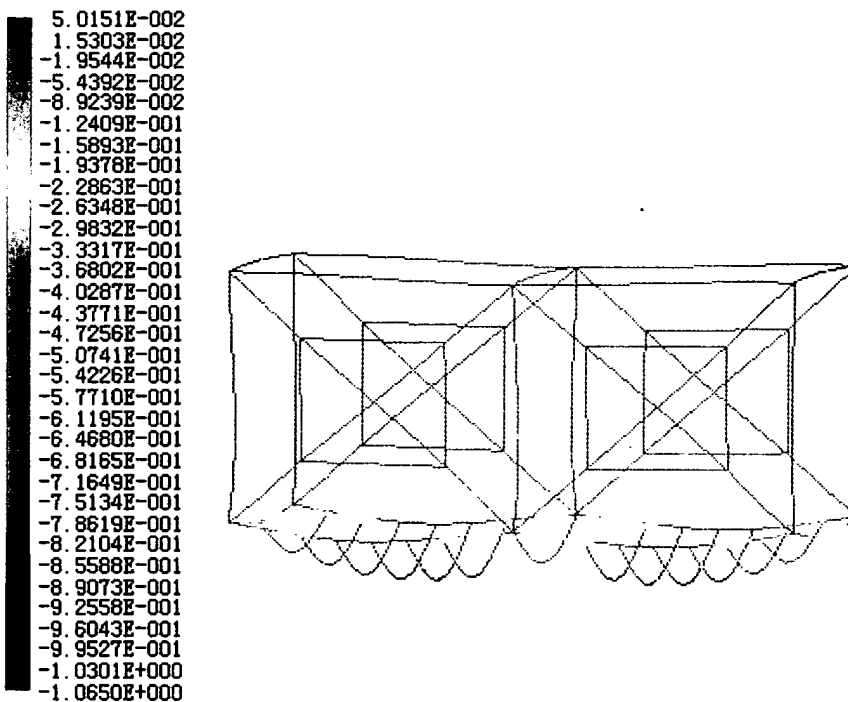


FIG. 72C: The 20 foot collapsible container frame deformation under 29,871 distributed load and 1891kg weight (supported at the four top corners).

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 171 of 185

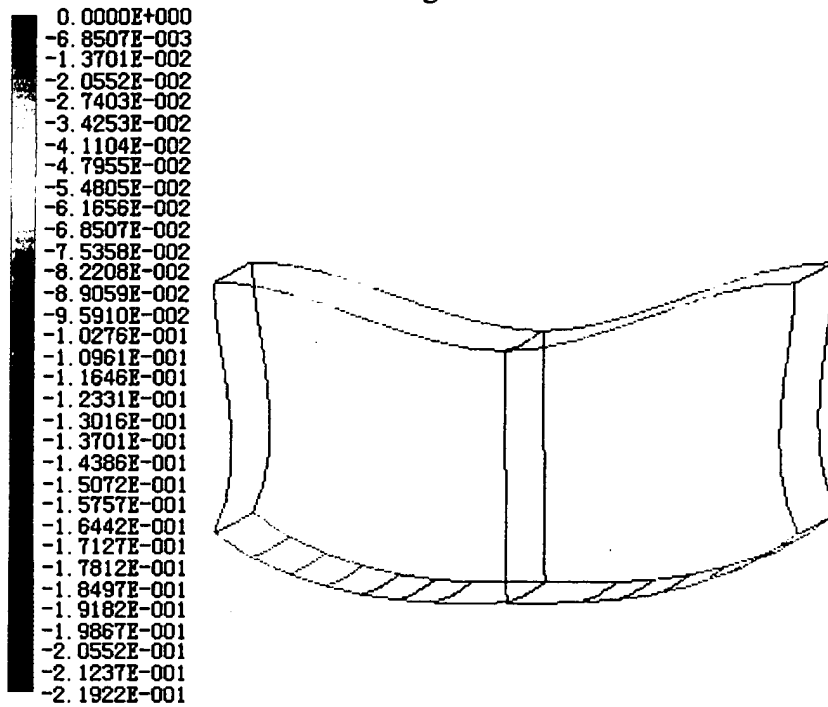


FIG. 73C: the container frame deformation under 22,221kg load at the four floor beam corners and 1891kg weight load (supported at the four top corners).

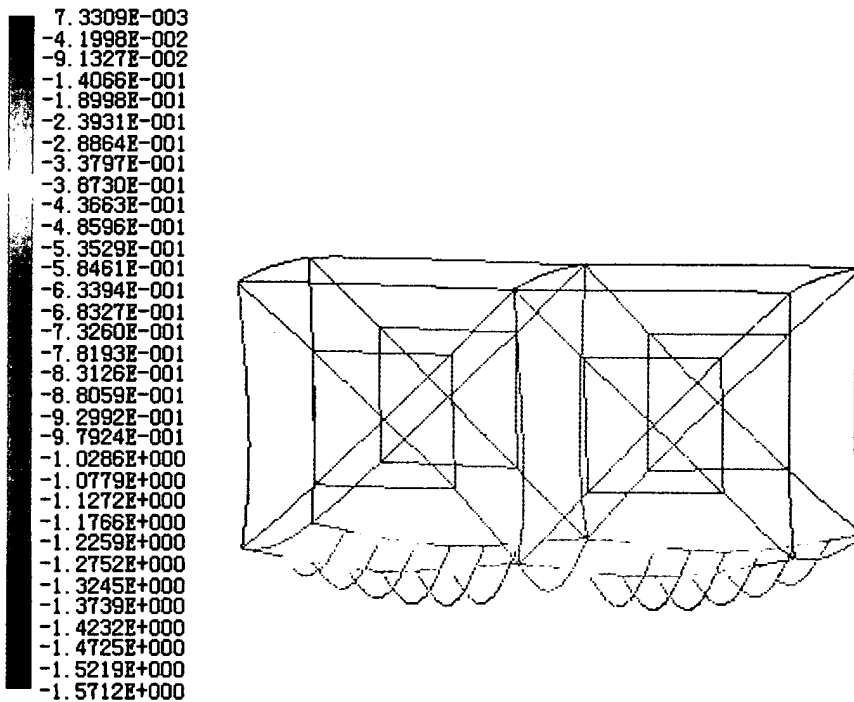


FIG. 68D: the 20 foot collapsible high cube container frame deformation under 44,452kg distributed load and 1936kg weight (simply supported at the four floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 172 of 185

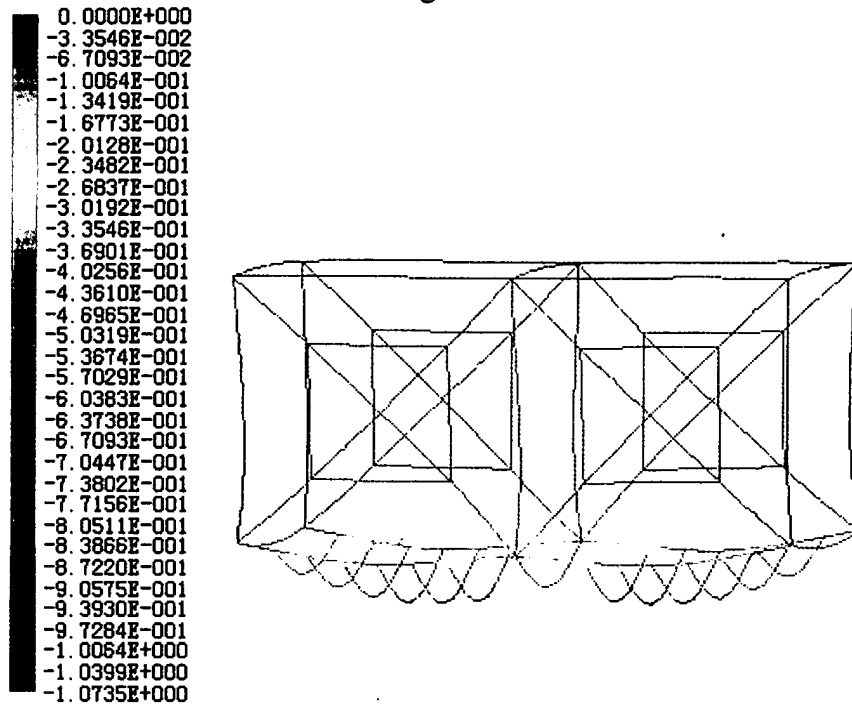


FIG. 69D: The 20 foot collapsible high cube container frame deformation under 29,871 distributed load and 1936kg weight (simply supported at the four floor corners)

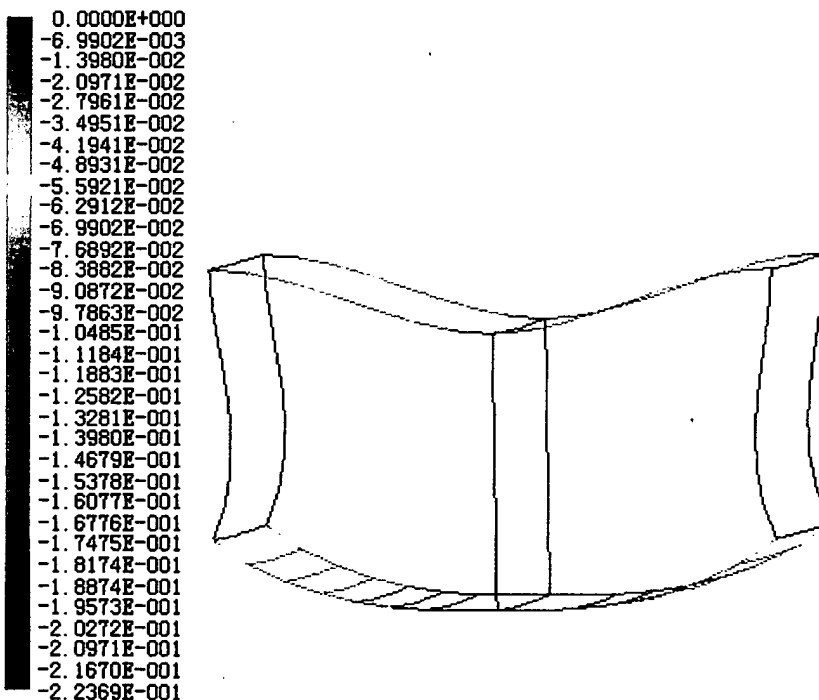


FIG. 70D: The 20 foot collapsible high cube container frame deformation under 22,221kg load at the four floor beam corners and 1936kg weight load (simply supported at the four floor corners)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 173 of 185

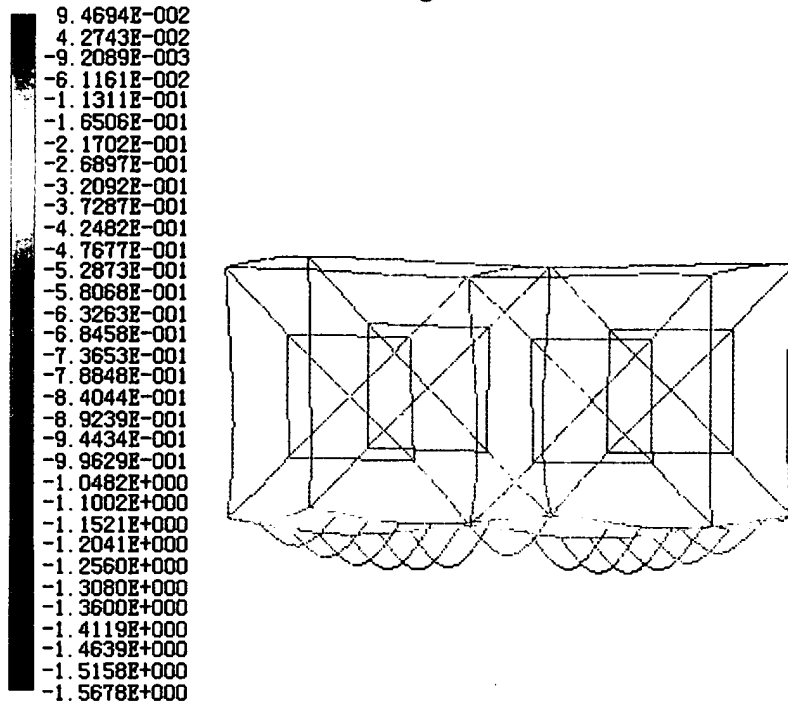


FIG. 71D: The 20 foot collapsible high cube container frame deformation under 44,452kg distributed load and 1936kg weight (simply supported at the four top corners)

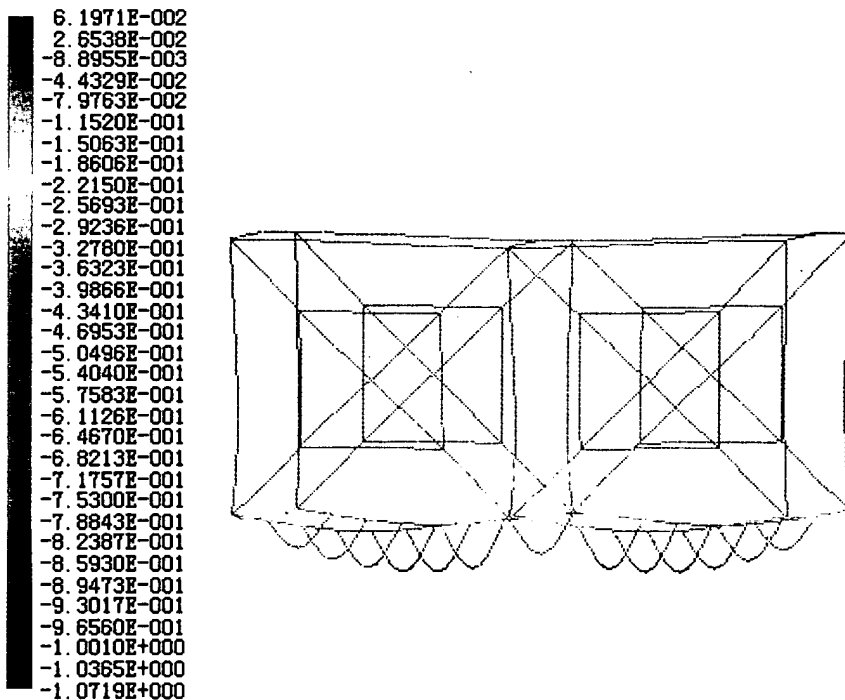


FIG. 72D: The 20 foot collapsible high cube container frame deformation under 29,871kg distributed load and 1936kg weight (simply supported at the four top corners)

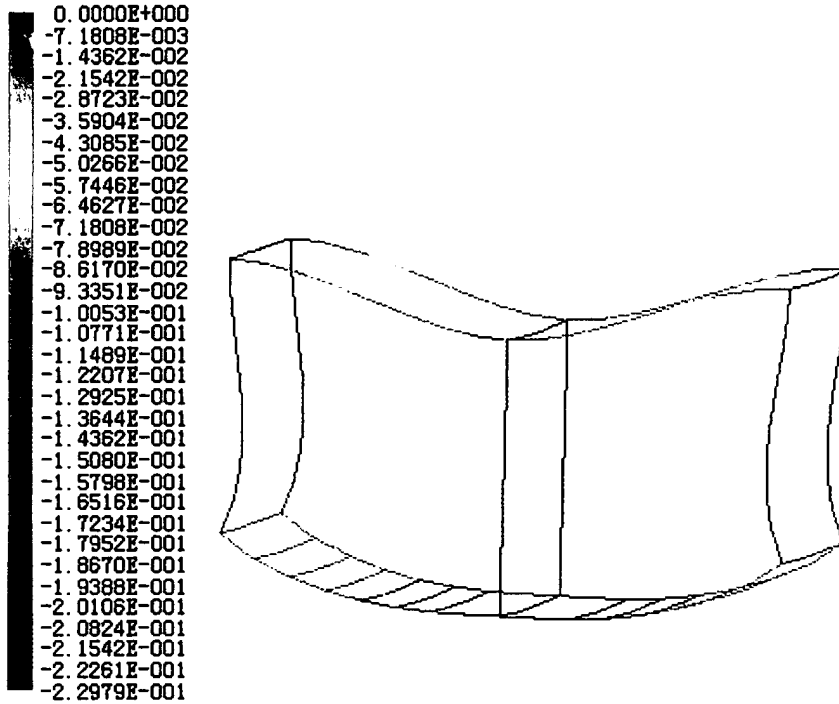


FIG. 73D: The 20 foot collapsible high cube container frame deformation under 22,221kg load at the four floor beam corners and 1936kg weight load (simply supported at the four top corners)

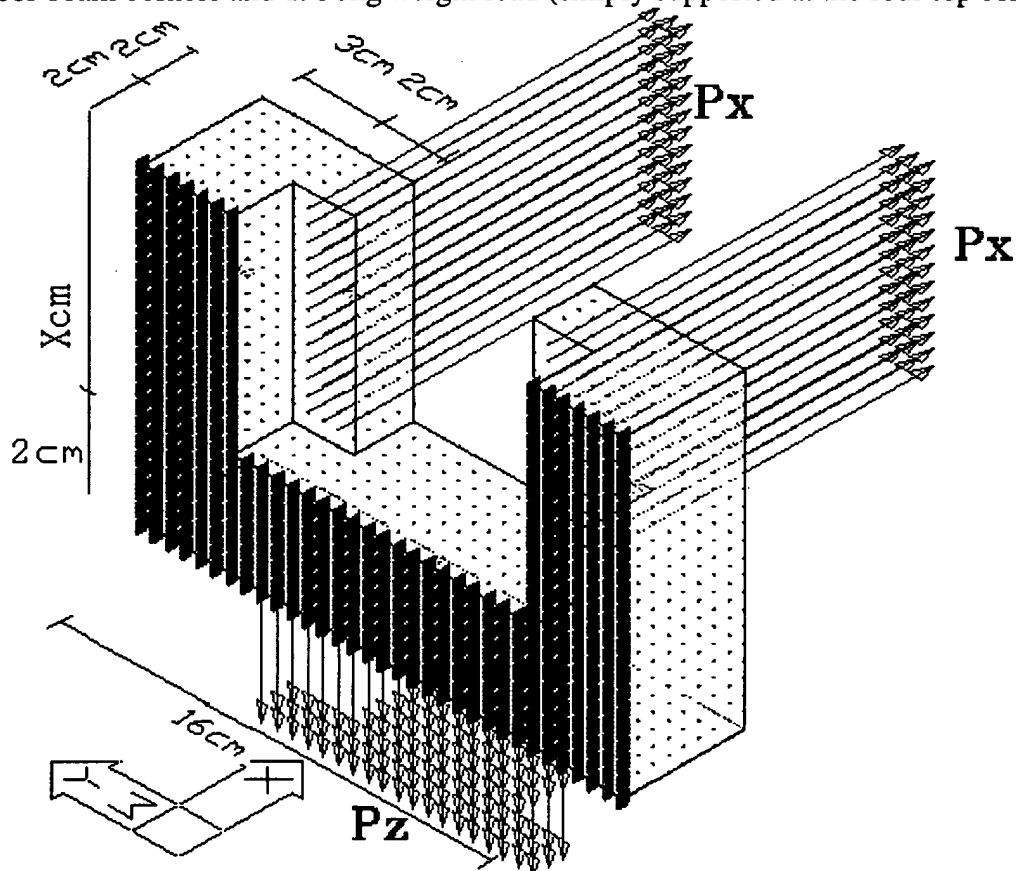


FIG. 74: The joint T pin holder and its load condition.

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 175 of 185

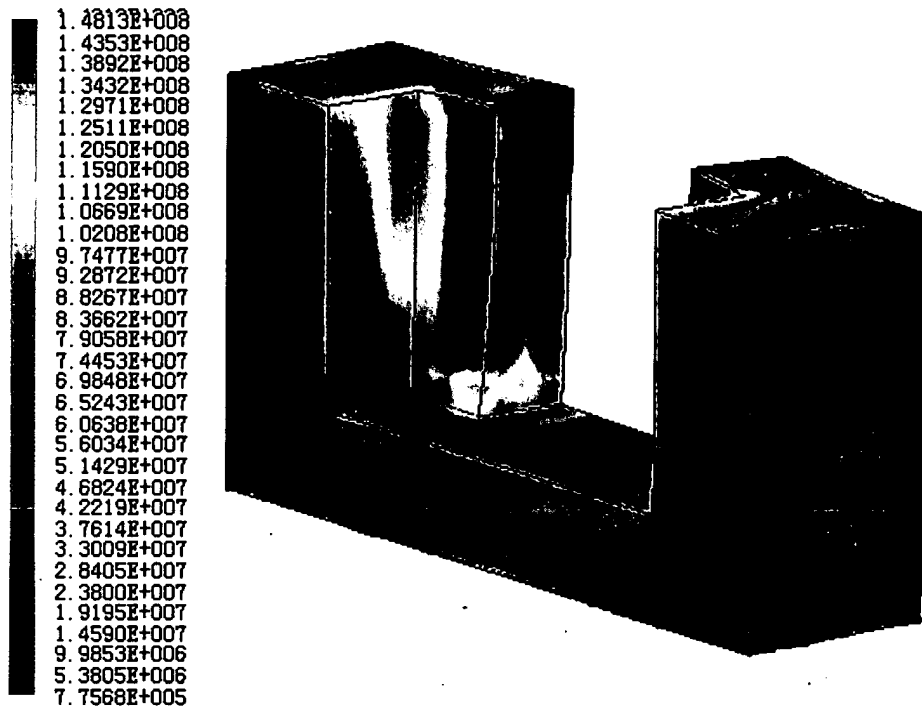


FIG. 75: The floor level joint T pin holder stress contour.

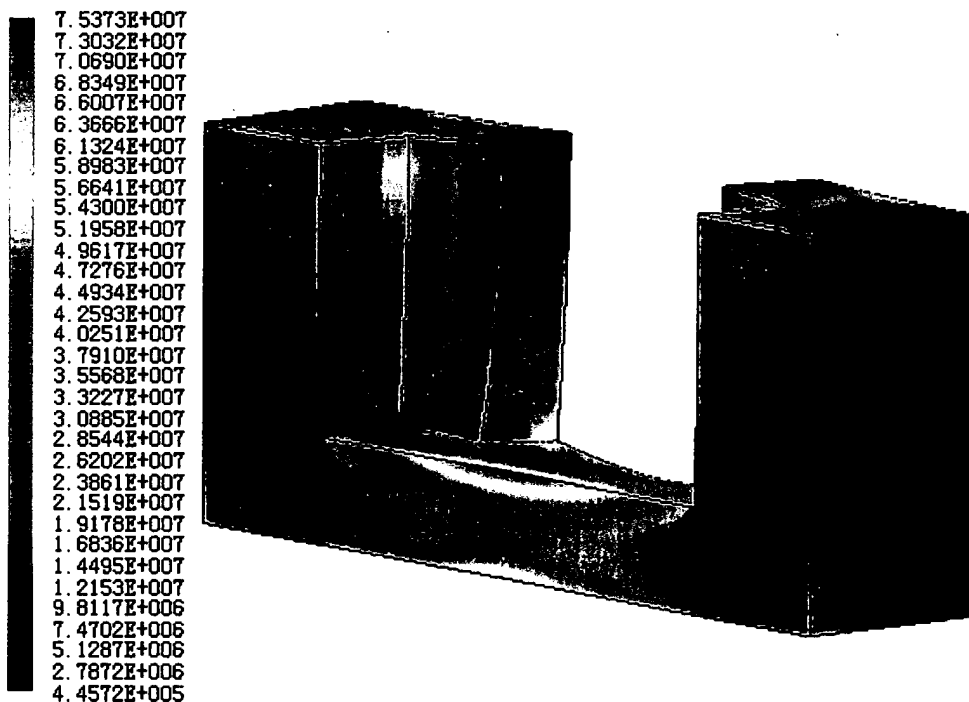


FIG. 76: The ceiling level joint T pin holder stress contour.

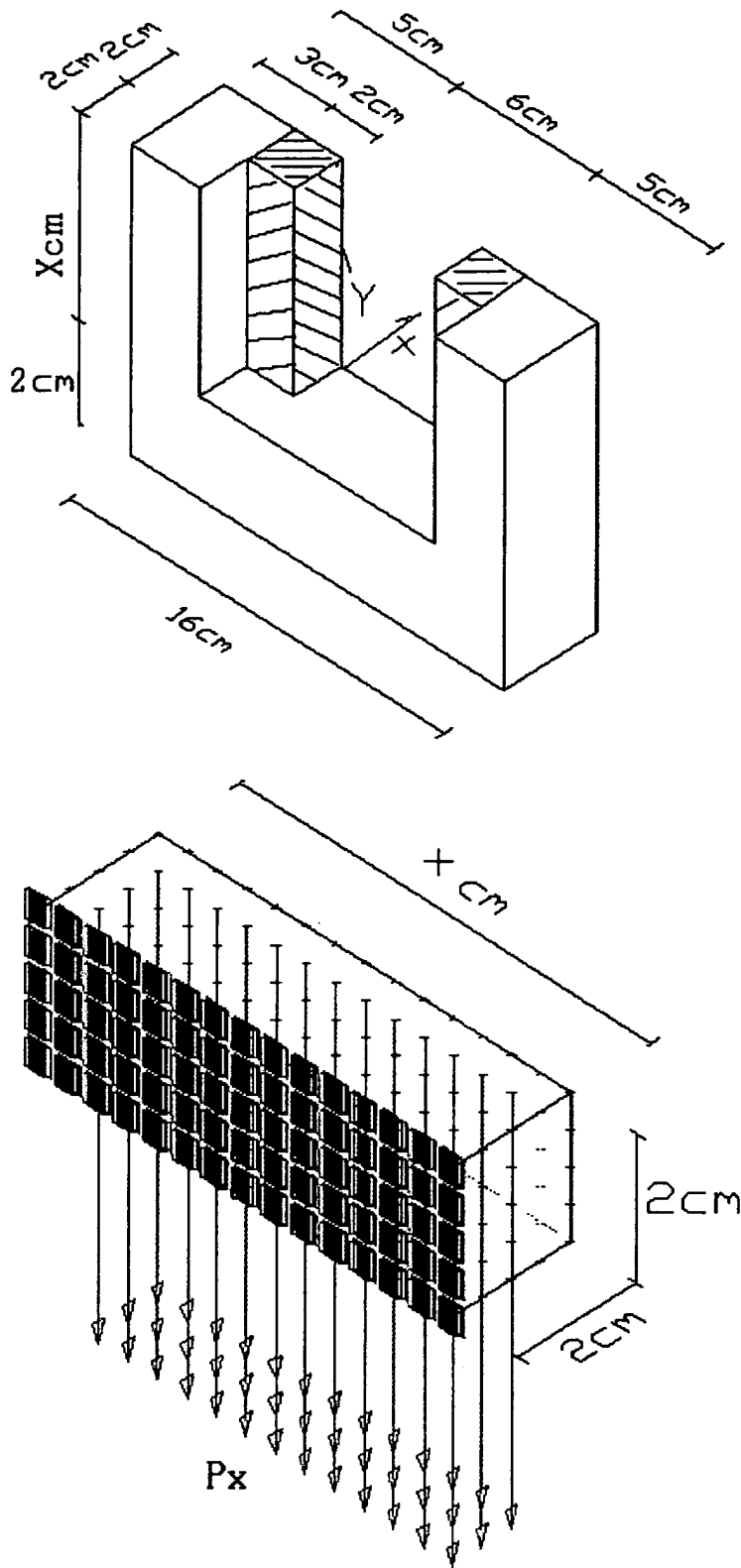


FIG. 77: The joint T pin holder detail analysis.

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 177 of 185

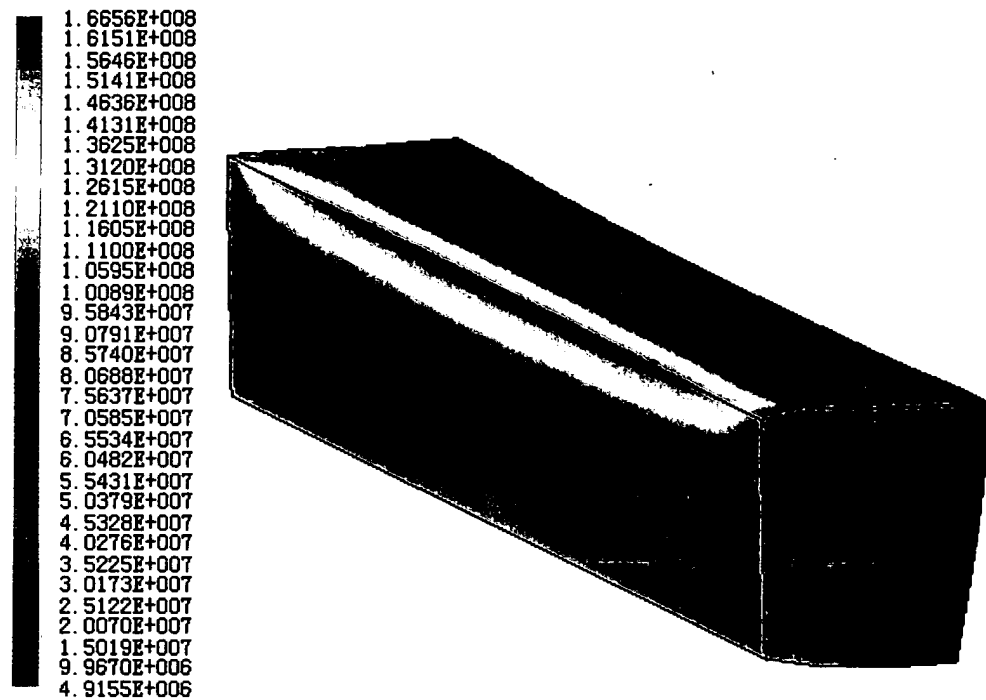


FIG. 78: The joint T pin holder detail stress contour at the floor level.

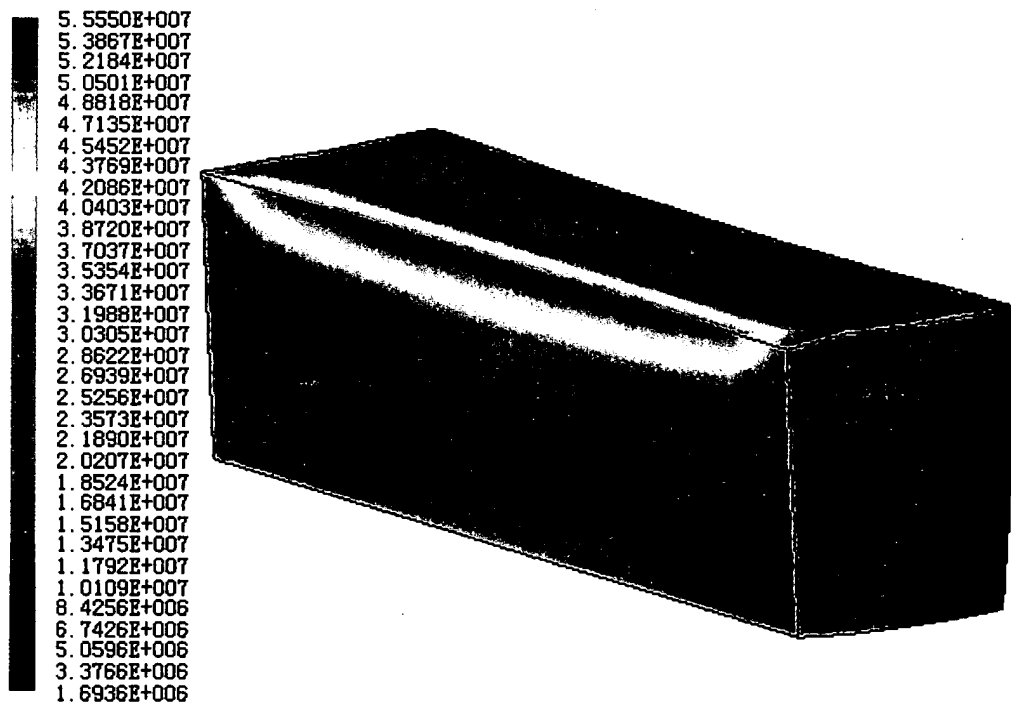


FIG. 79: The joint T pin holder detail stress contour at the ceiling level.

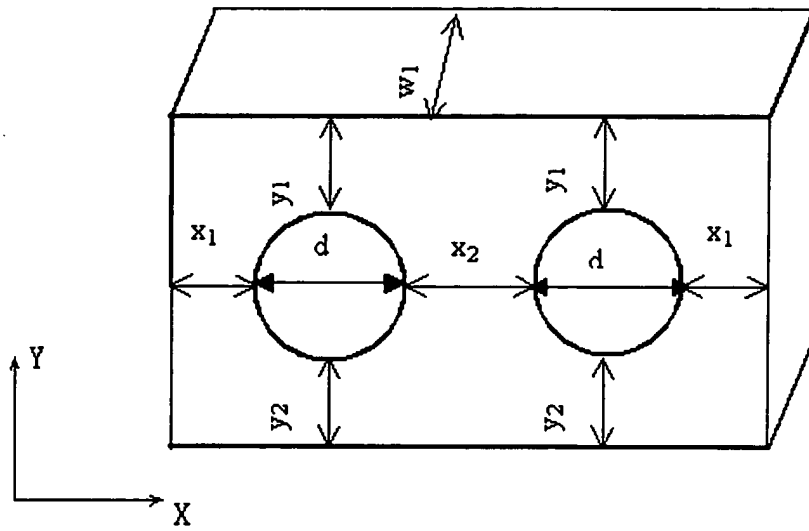


FIG. 80: The male pin base.

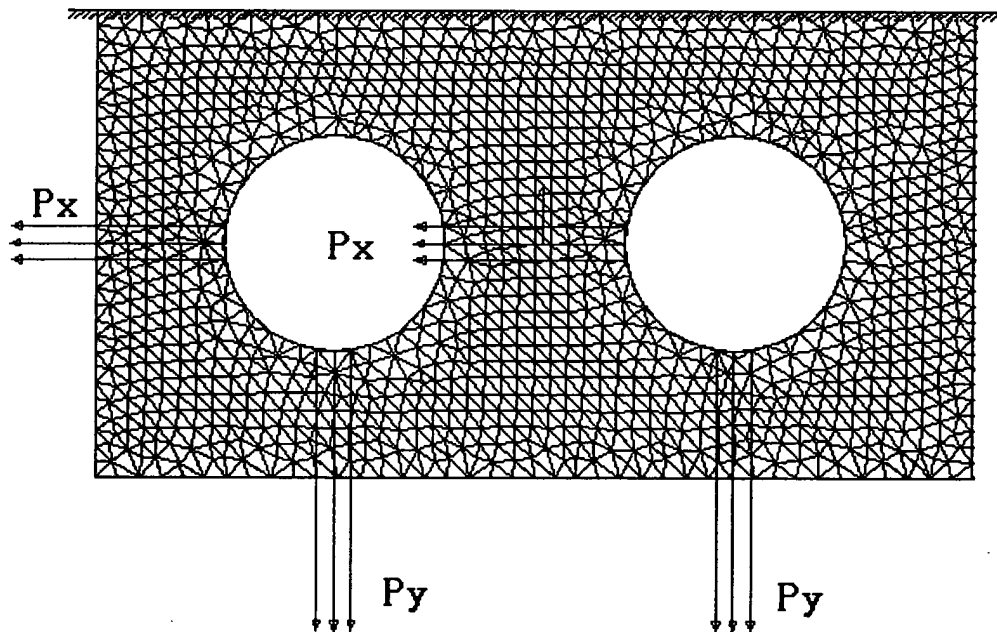


FIG. 81: The male pin base finite element model and load.

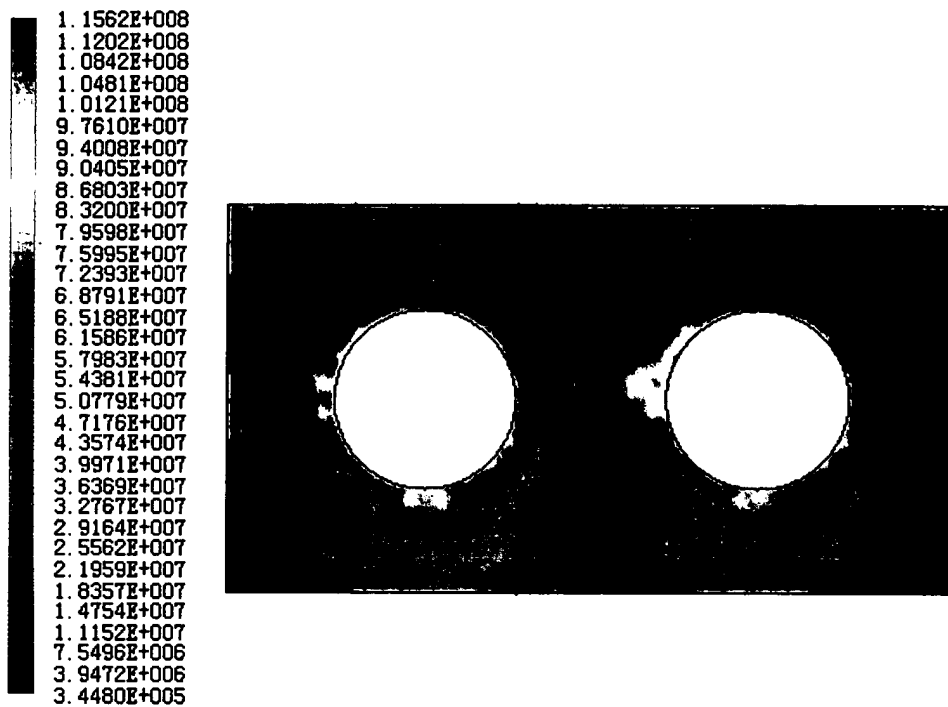


FIG. 82: The male pin base stress contour.

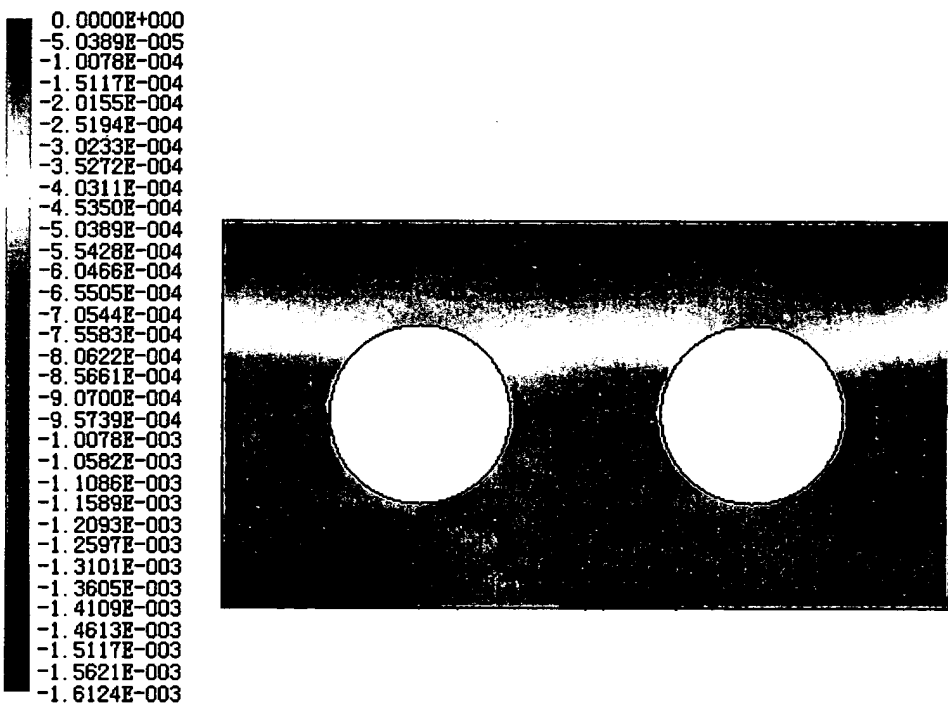


FIG. 83: The male pin base deformation graph of X- orientation.

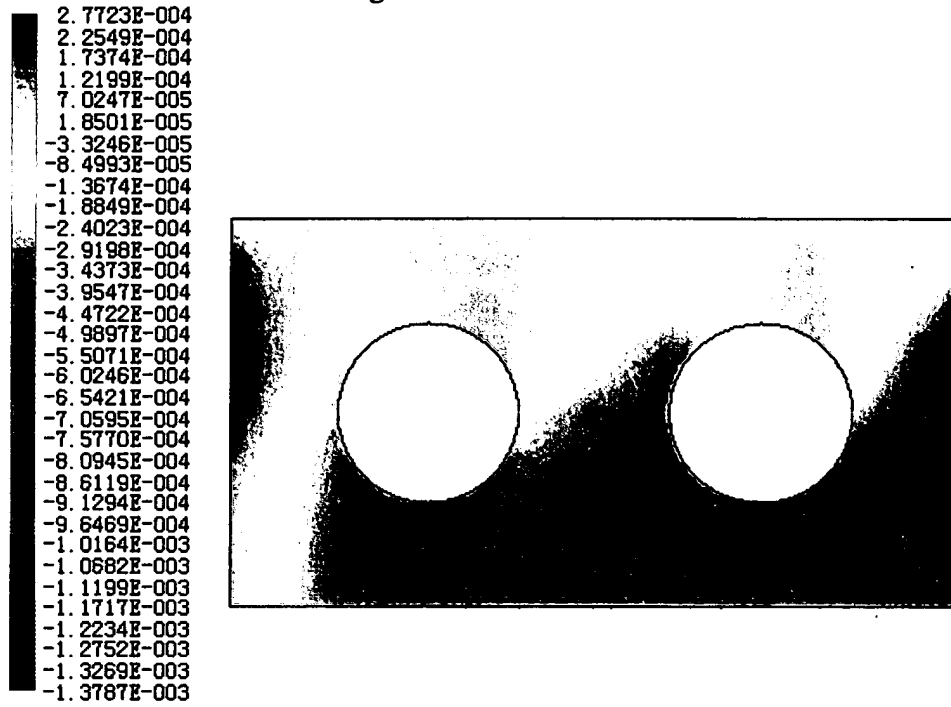


FIG. 84: The male pin base deformation graph of Y-orientation.

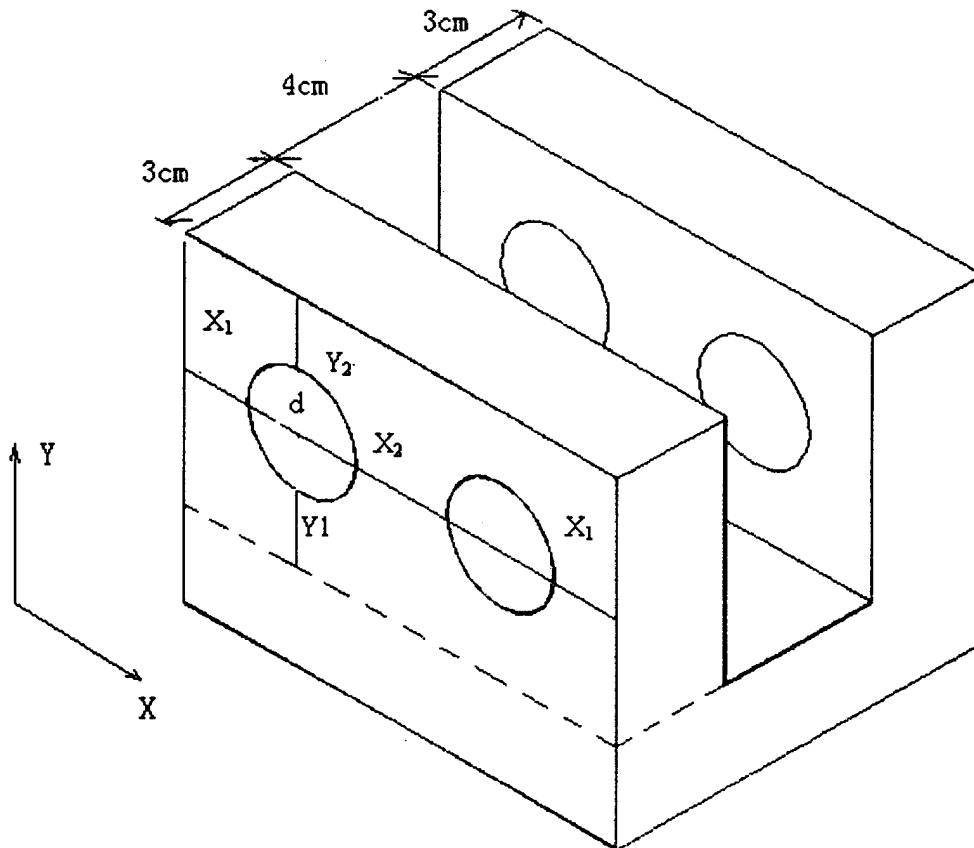


FIG. 85: The female pin base.

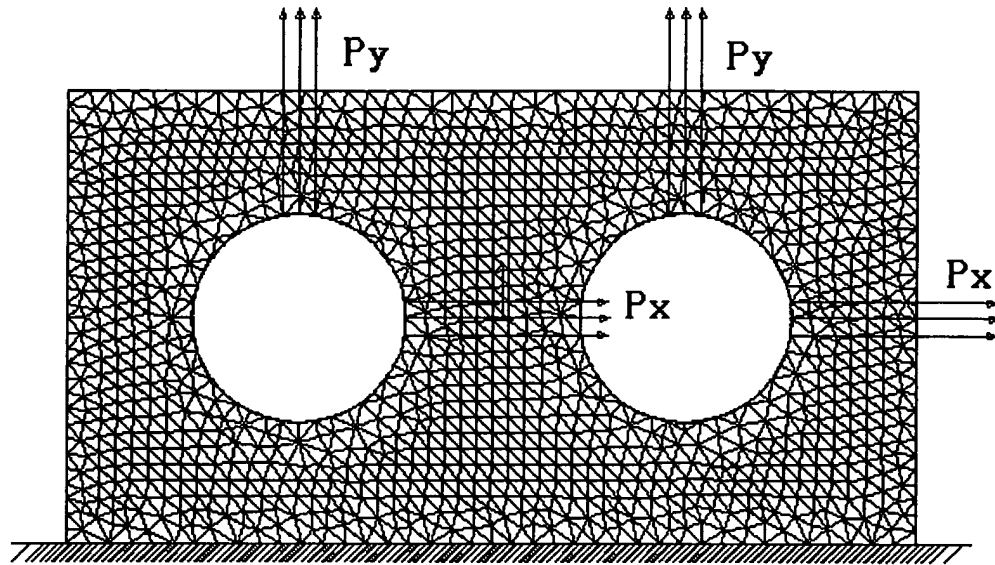


FIG. 86: The female pin base finite element model and load.

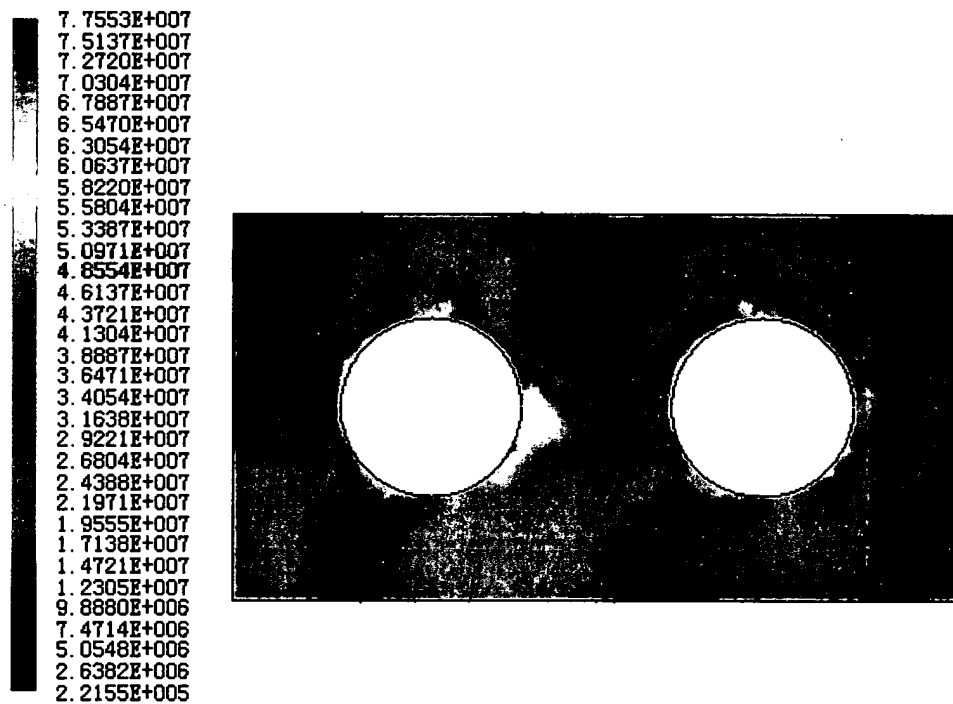


FIG. 87: The female pin base stress contour.

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 182 of 185

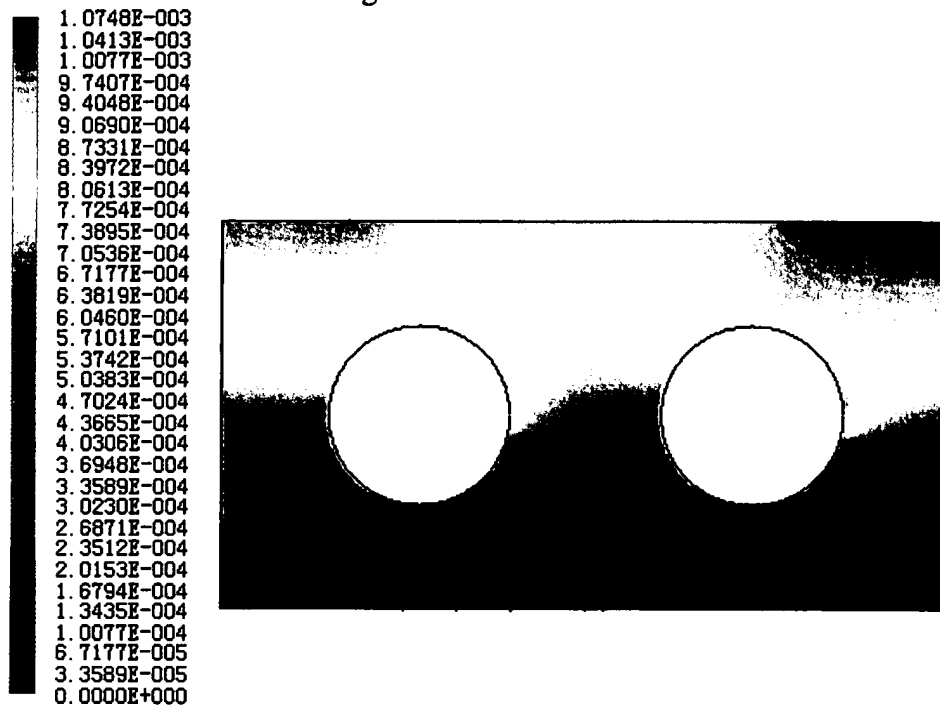


FIG. 88: The female pin base deformation graph of X- orientation.

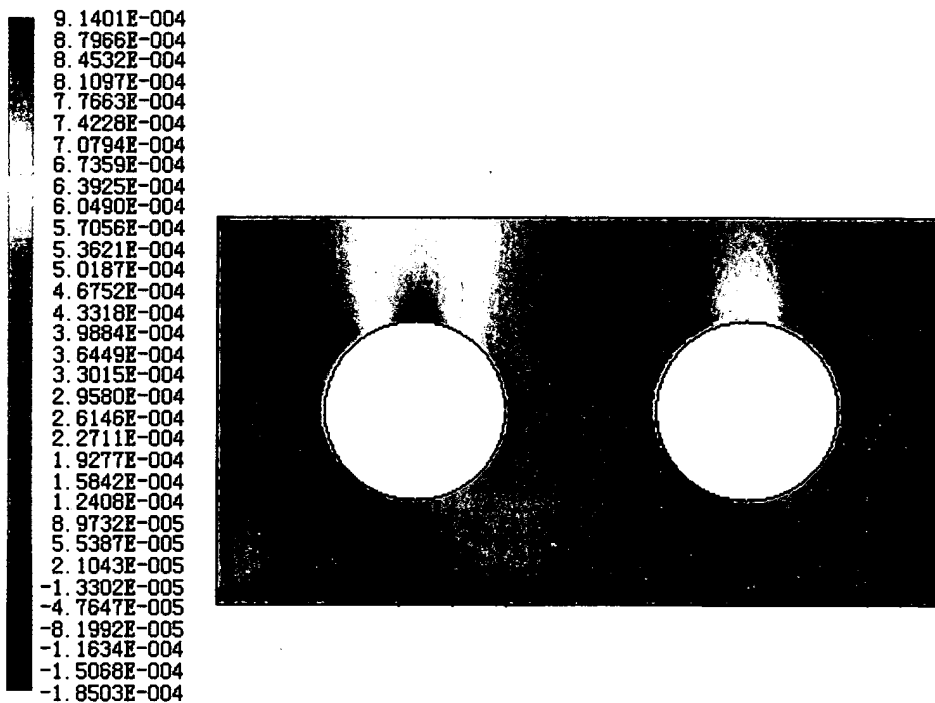


FIG. 89: The female pin base deformation graph of Y- orientation.

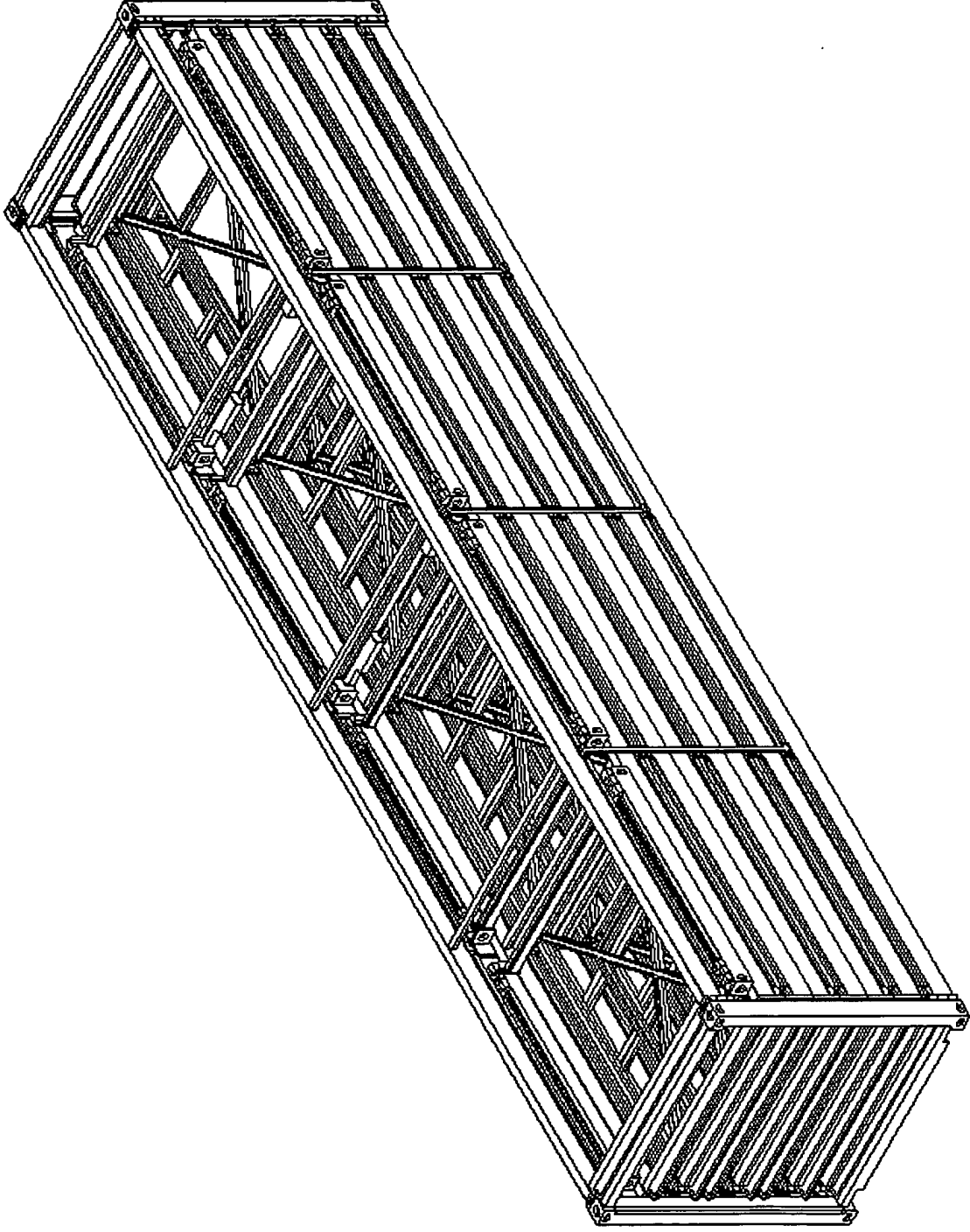


FIG. 1A: Basic isometric view of the 40 foot collapsible cargo container frame loaded with three collapsed 40 foot collapsible cargo container frames. It is referred as "shipping collapsible cargo container"

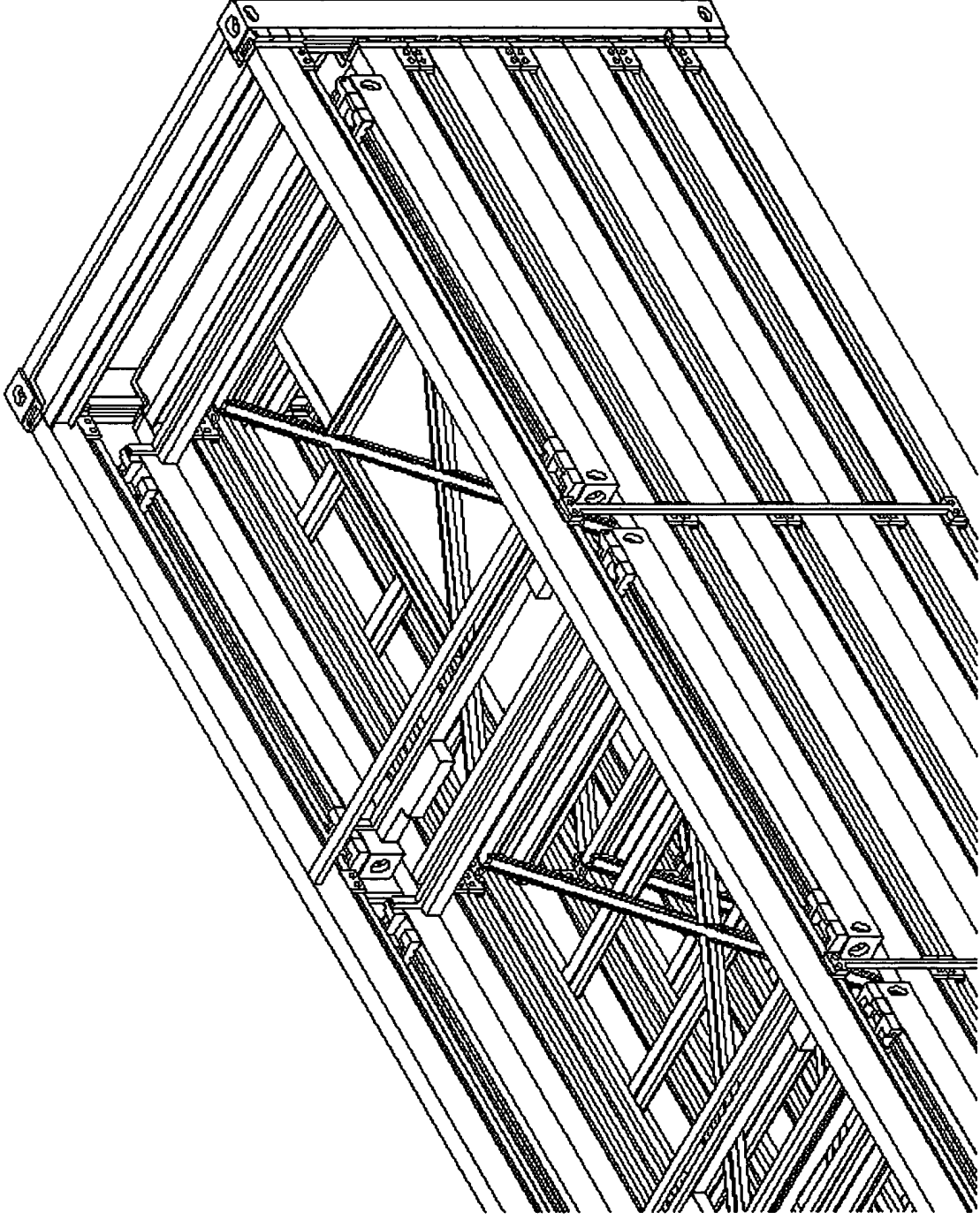


FIG. 2A: Detailed isometric view of the 40 foot collapsible cargo container frame loaded with three collapsed 40 foot collapsible cargo container frames

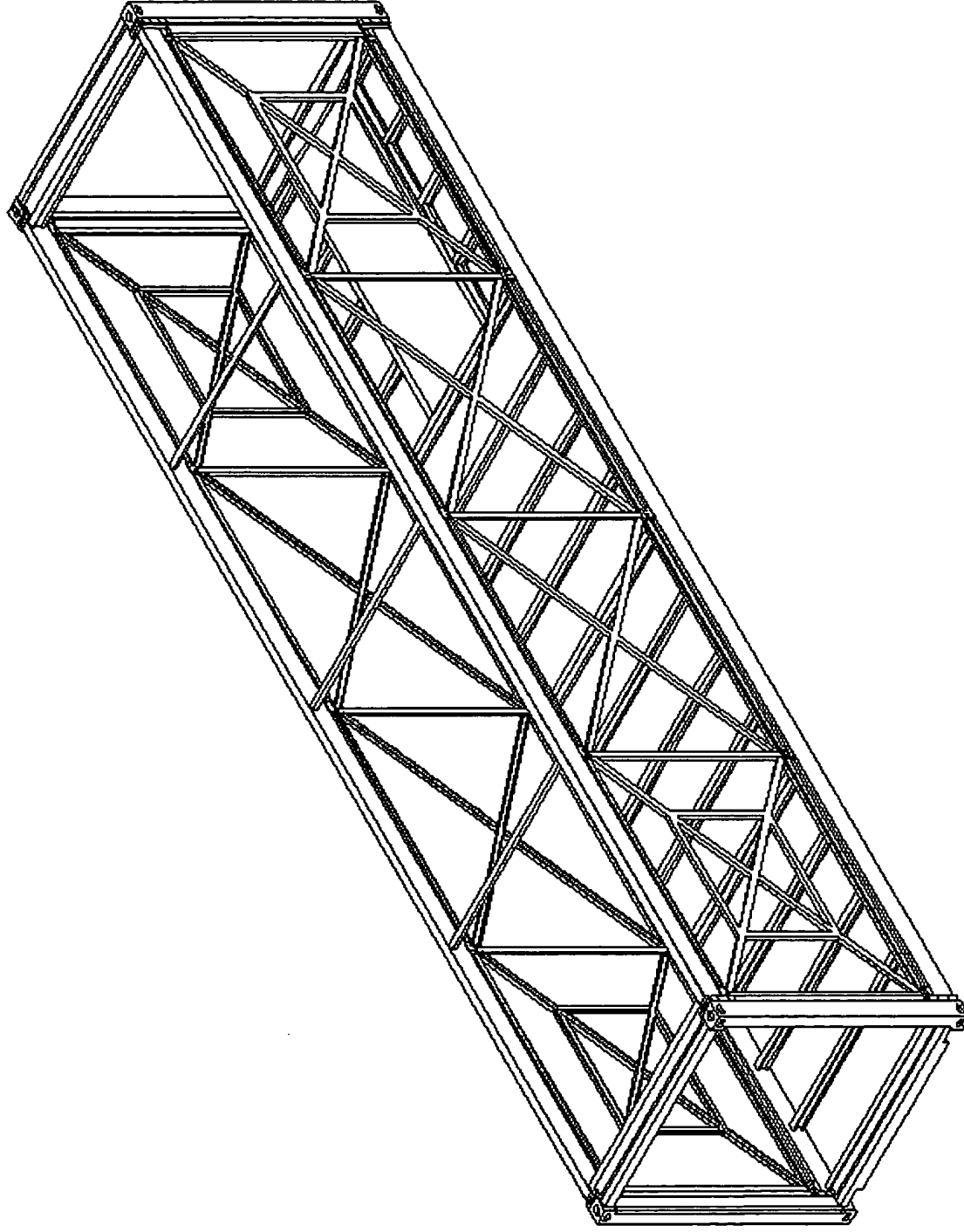


FIG. 3A: Basic isometric view of the 40 foot collapsible cargo container frame

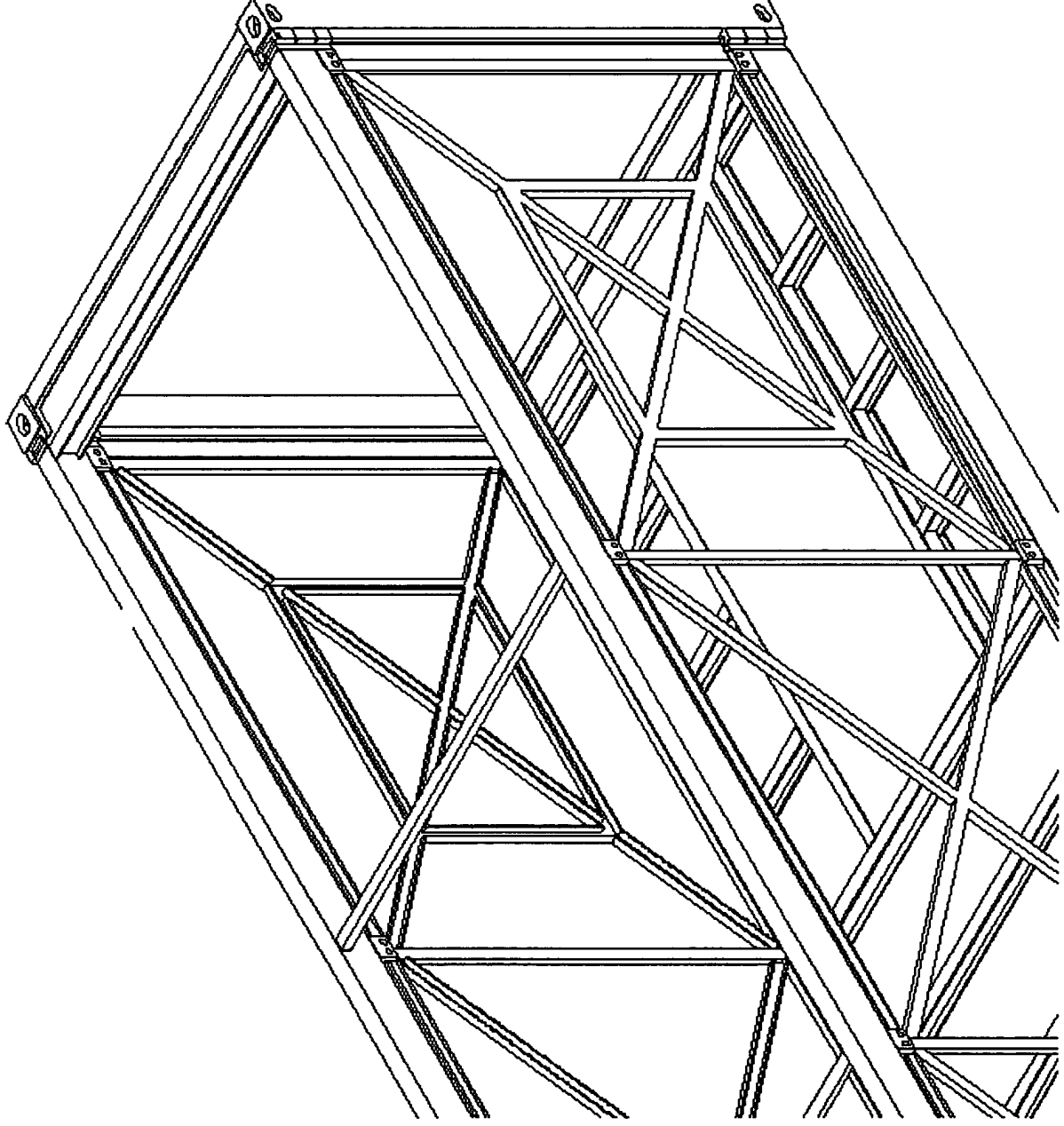


FIG. 4A: Enlarged isometric view of the left end of a 40 foot collapsible cargo container

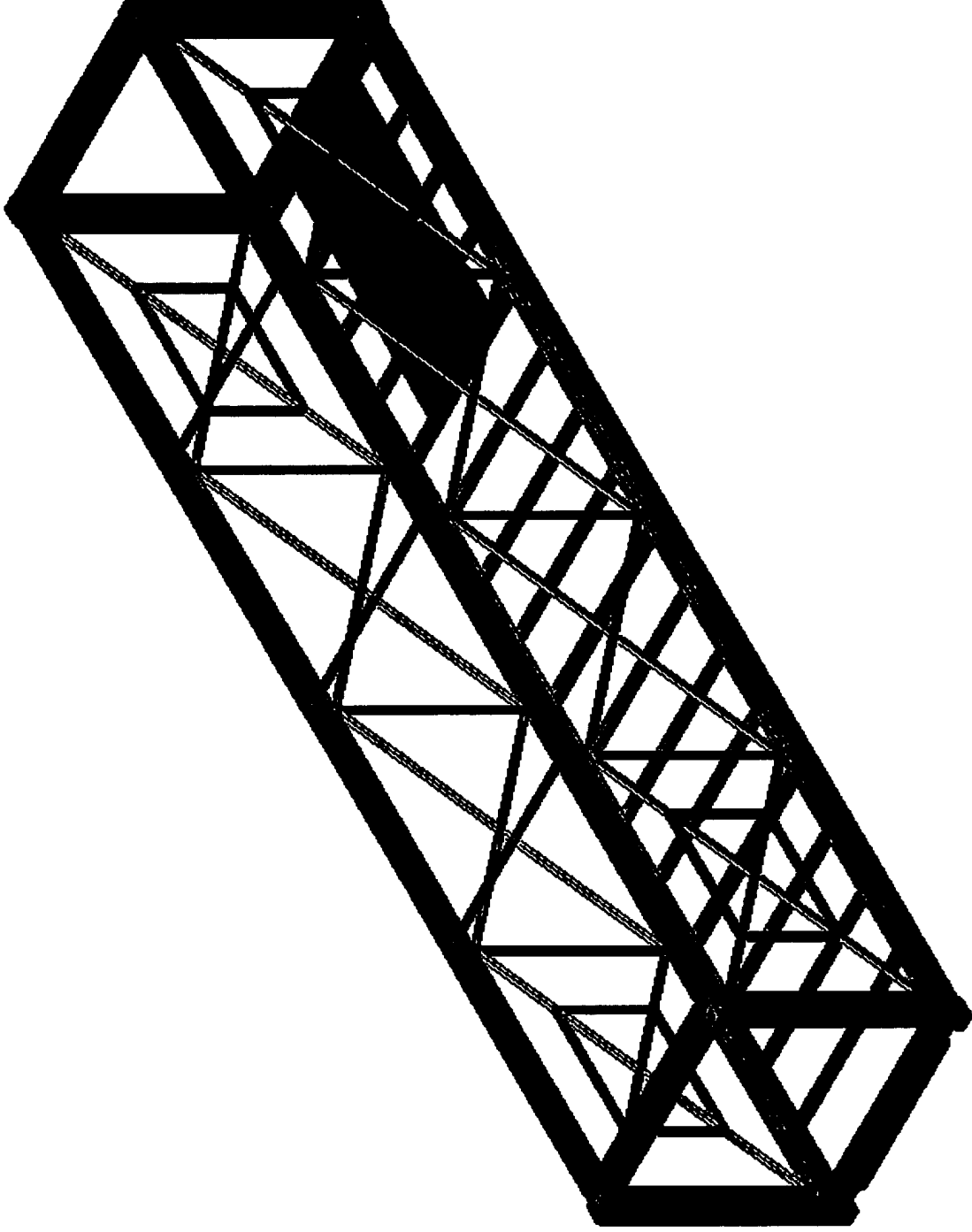


FIG. 5A: Opaque isometric view of the 40 foot collapsible cargo container frames

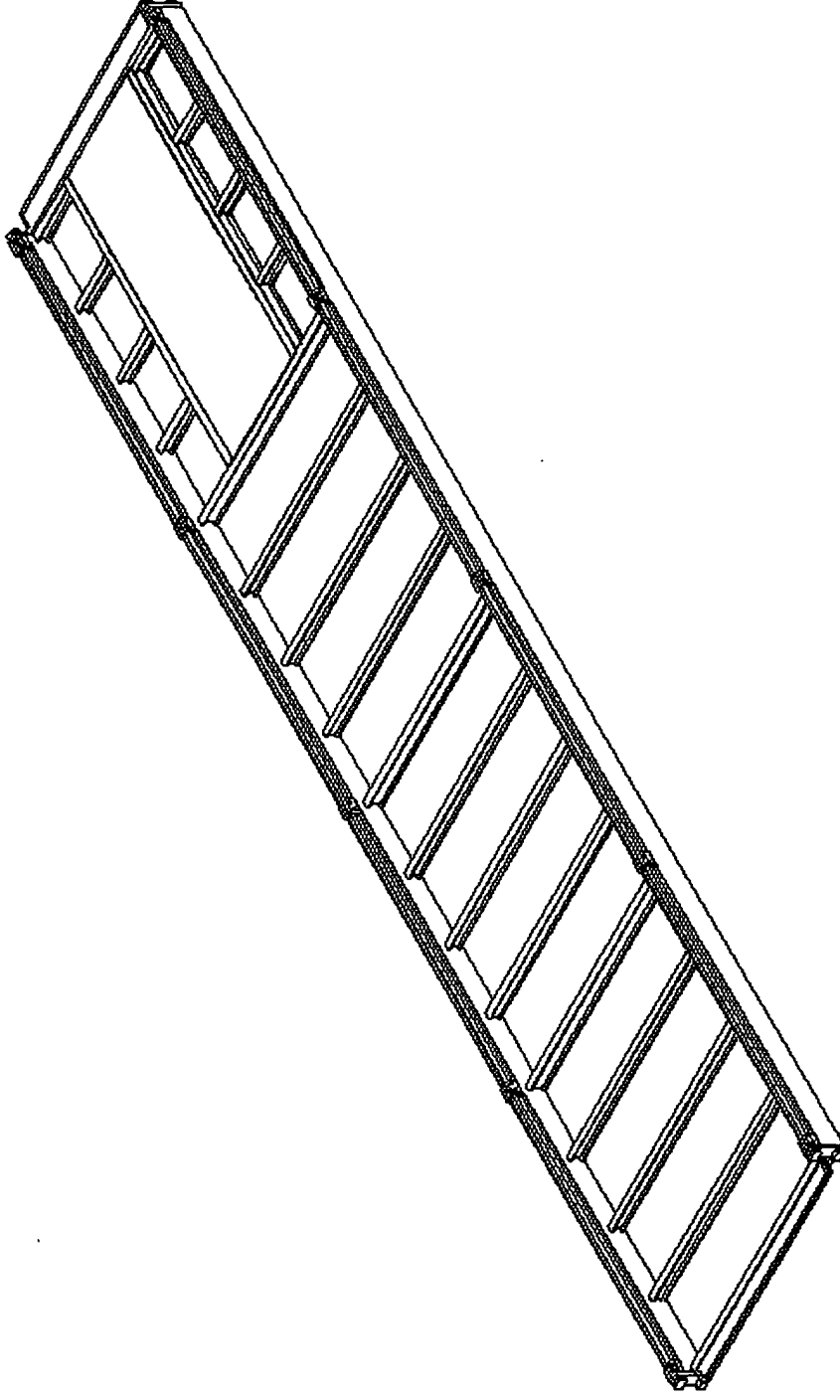


FIG. 6A: Basic isometric view of the floor frame (40 foot collapsible cargo container)

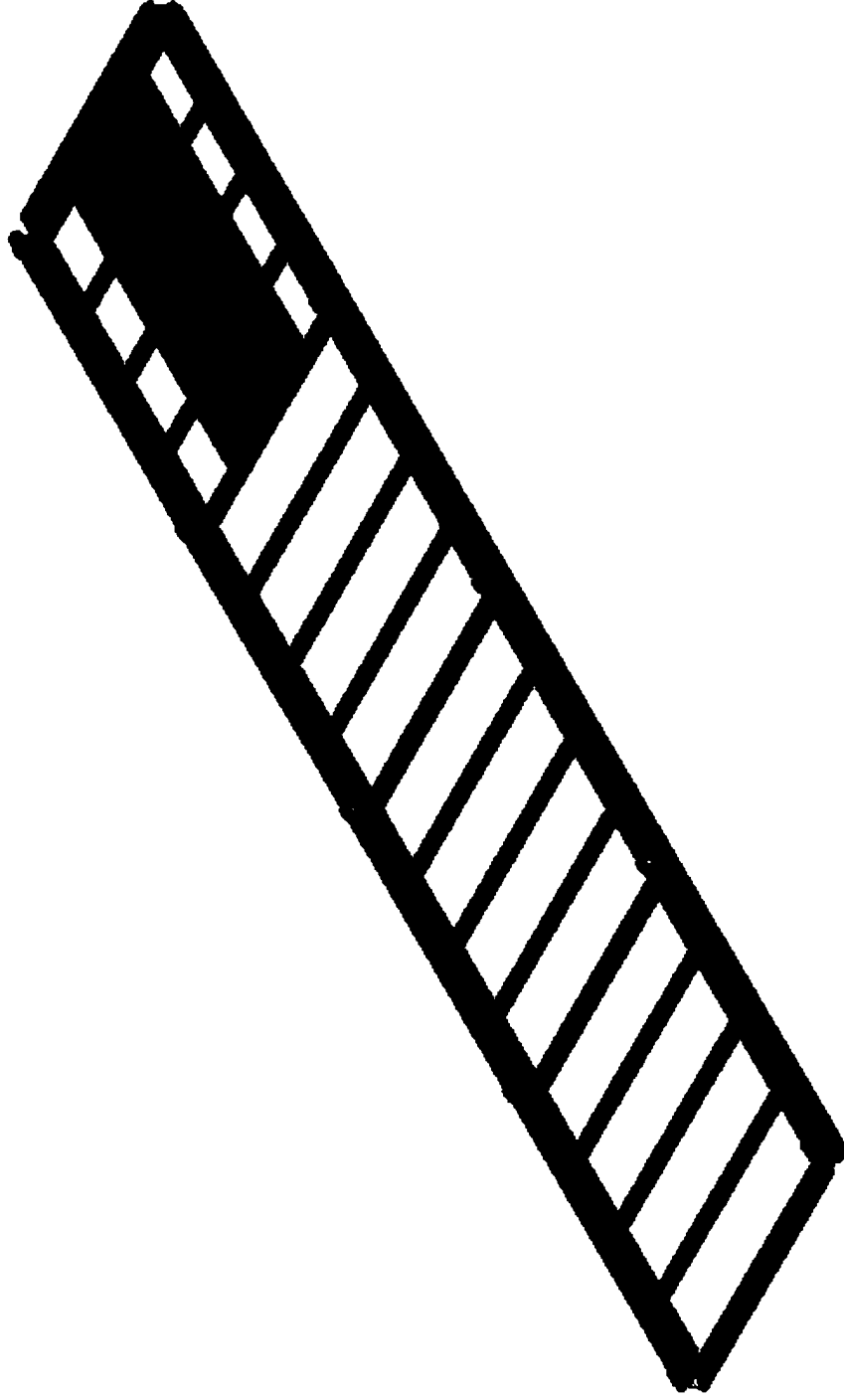


FIG. 7A: Opaque isometric view of the floor frame (40 foot collapsible cargo container)

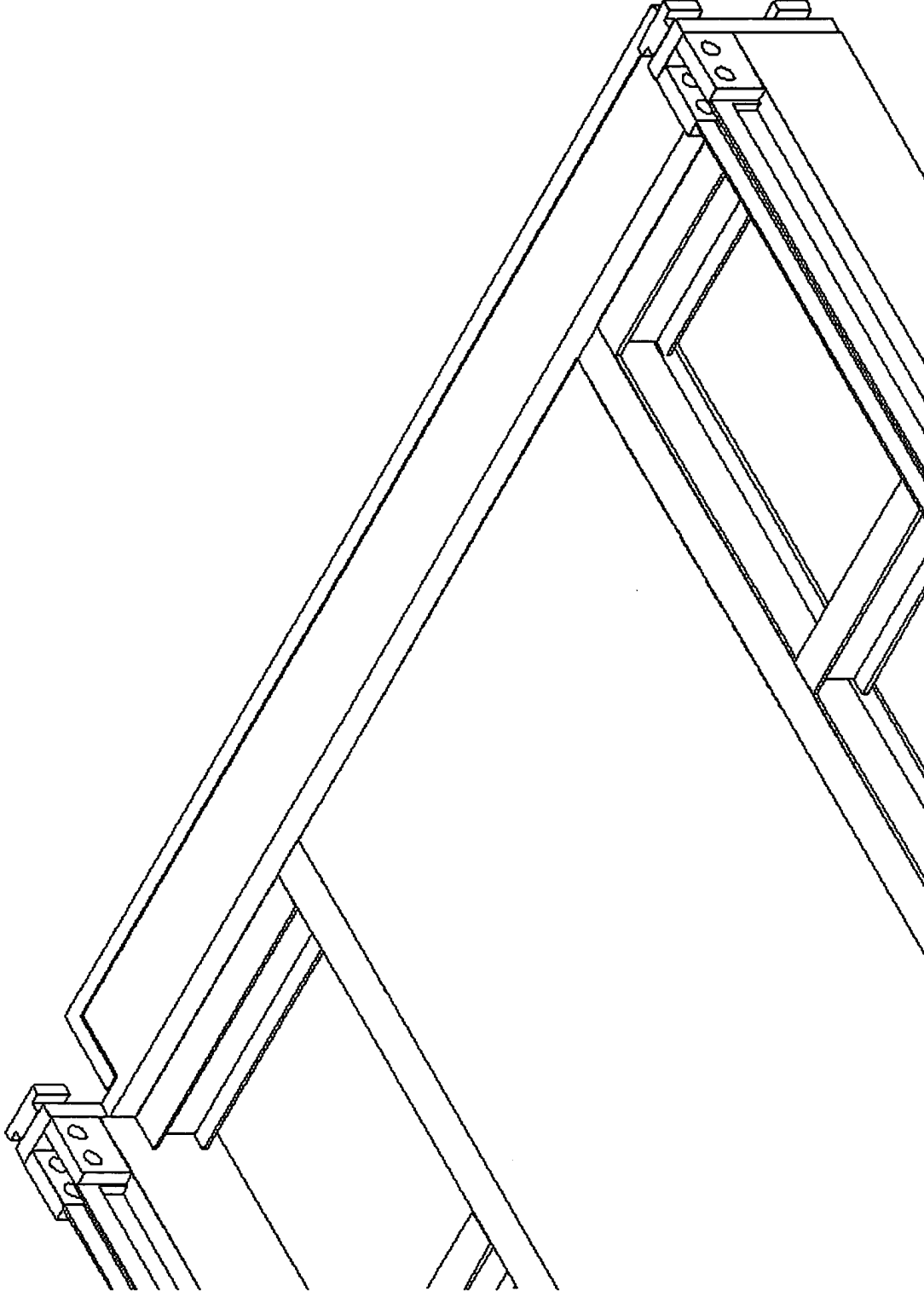


FIG. 8A: Isometric view of the left end of the floor frame (40 foot collapsible cargo container)

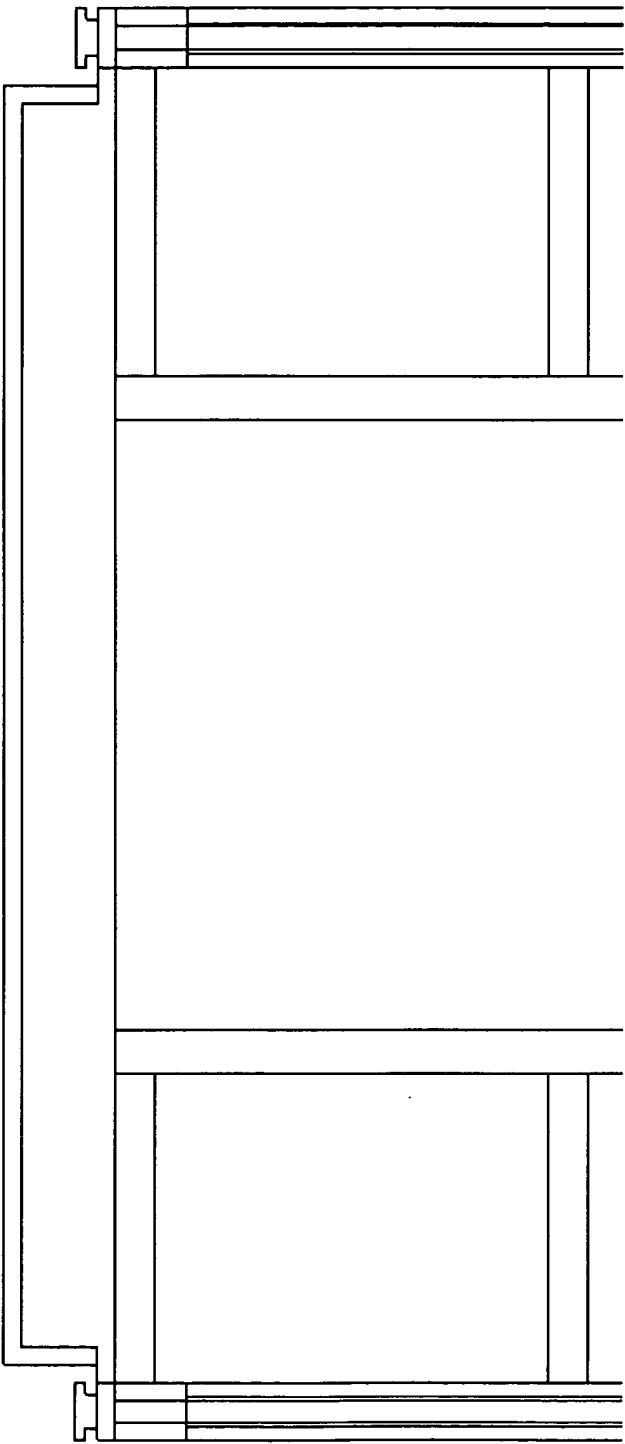


FIG. 9A: Top view of the left end of a floor frame (40 foot collapsible cargo container)

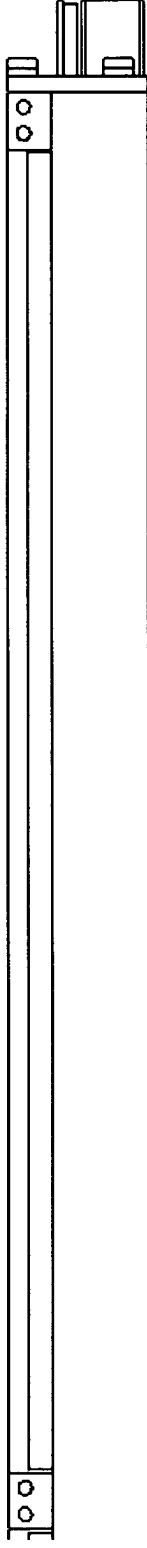


FIG. 10A: Front view of the left end of a floor frame (40 foot collapsible cargo container)

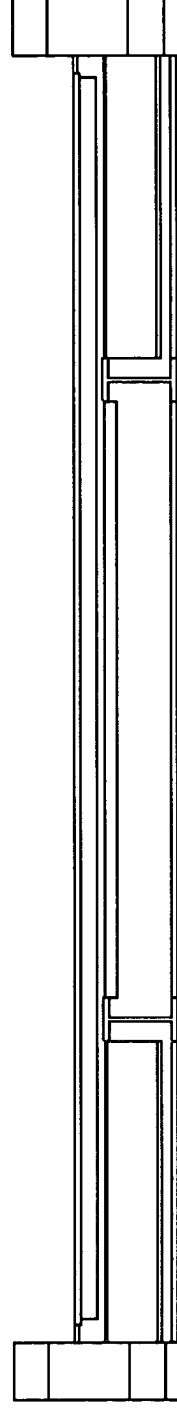


FIG. 11A: Left view of a floor frame (40 foot collapsible cargo container)

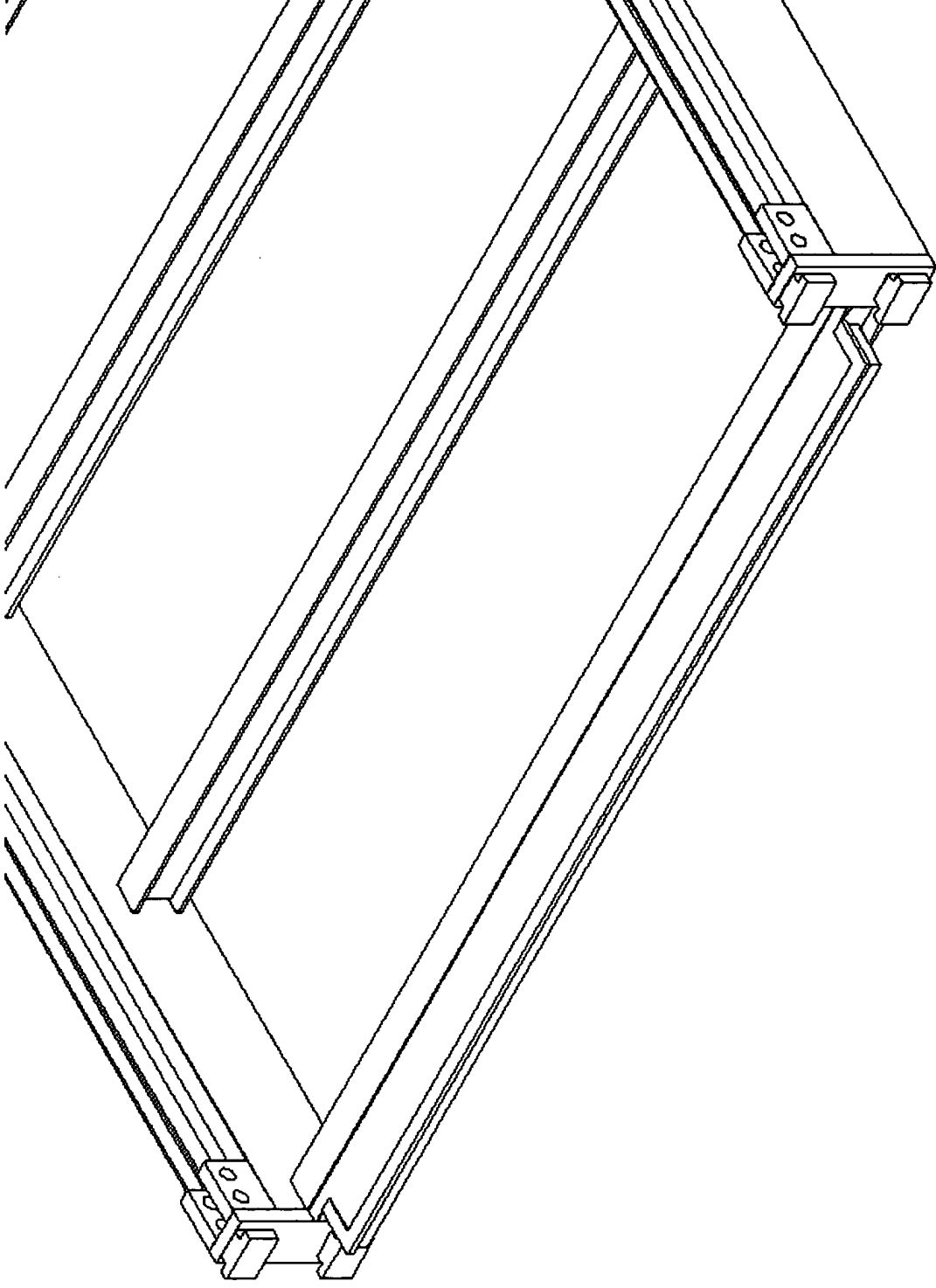


FIG. 12A: Isometric view of the right end of a floor frame (40 foot collapsible cargo container)

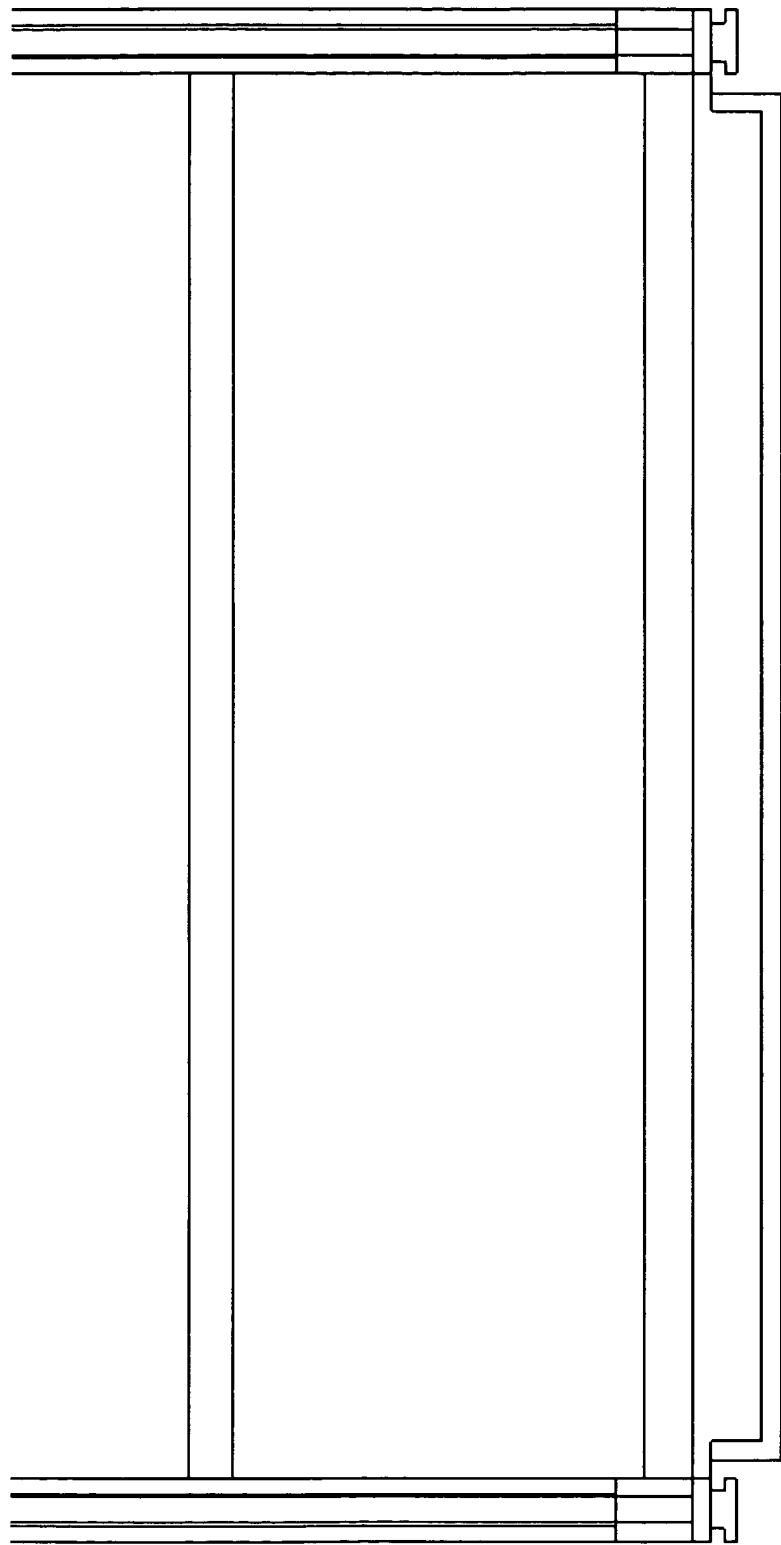


FIG. 13A: Top view of the right end of a floor frame (40 foot collapsible cargo container)

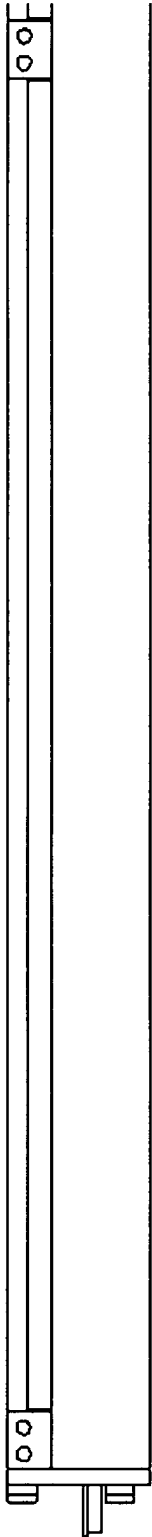


FIG. 14A: Front view of the right end of a floor frame (40 foot collapsible cargo container)

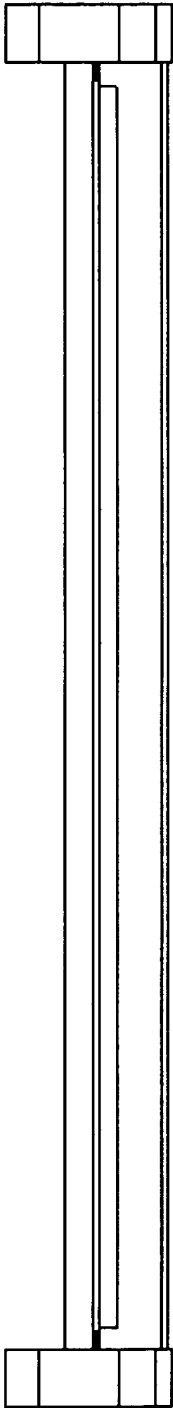


FIG. 15A: Right view of a floor frame (40 foot collapsible cargo container)

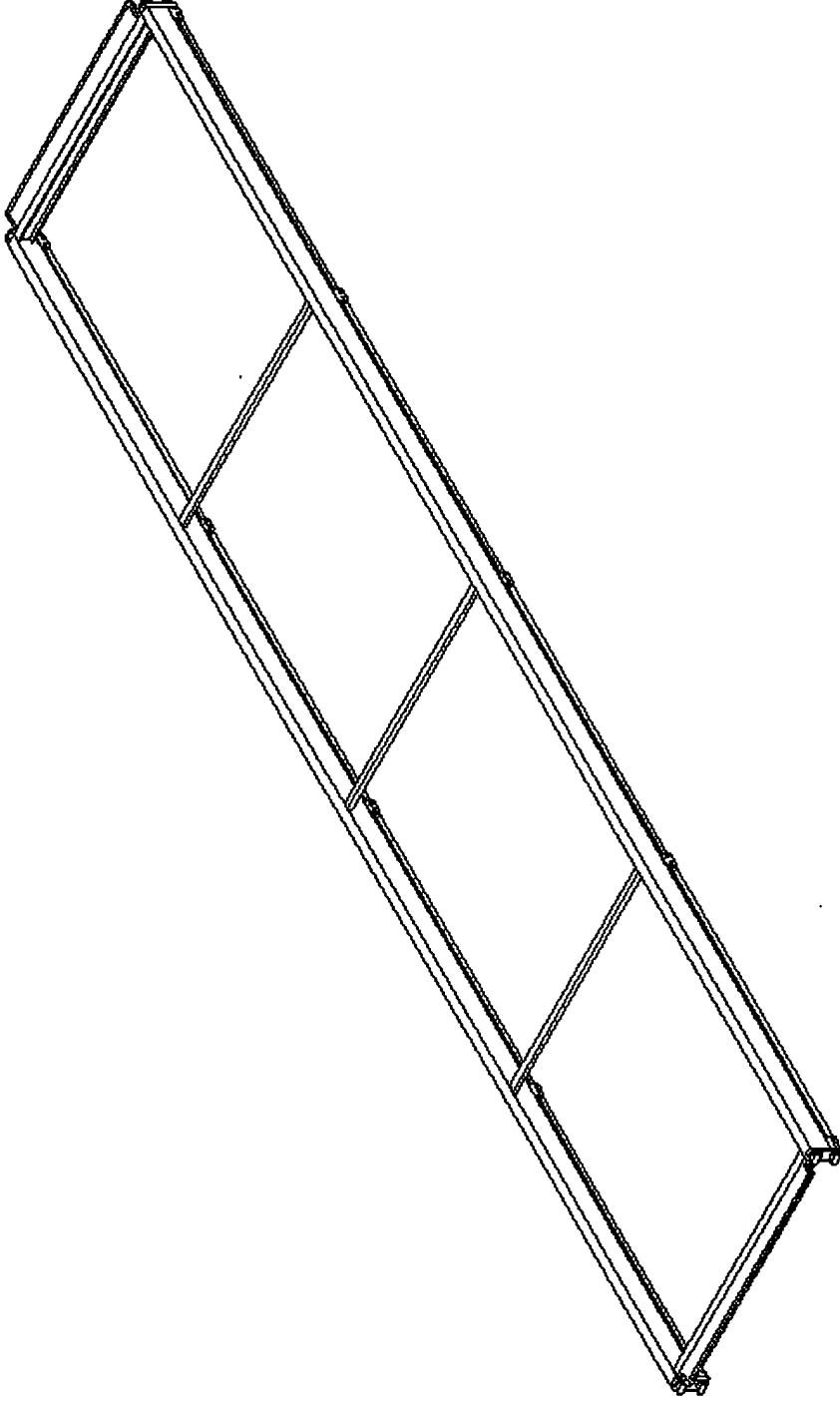


FIG. 16A: Isometric view of a ceiling frame (40 foot collapsible cargo container)

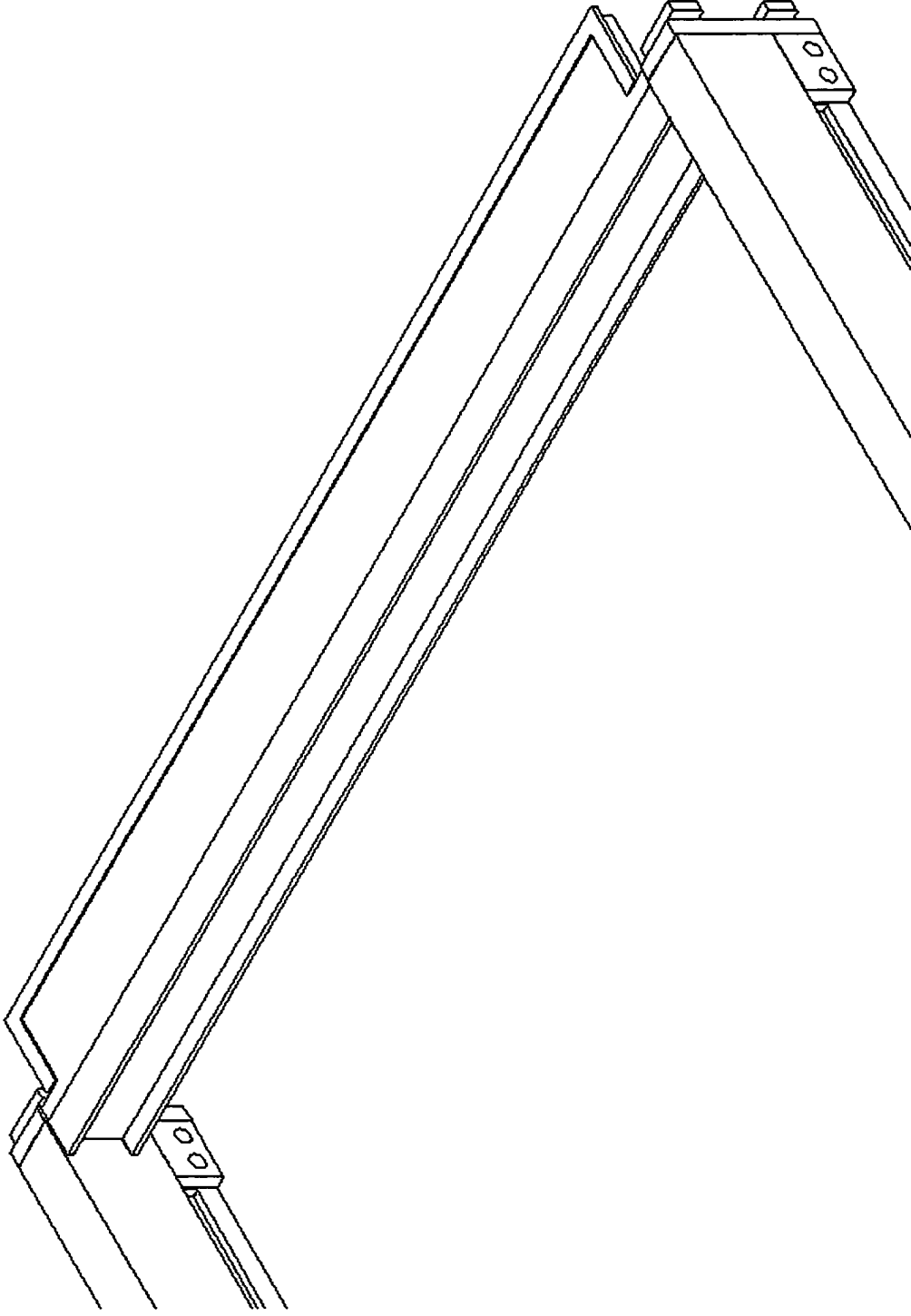


FIG. 17A: Isometric view of the left end of a ceiling frame (40 foot collapsible cargo container)

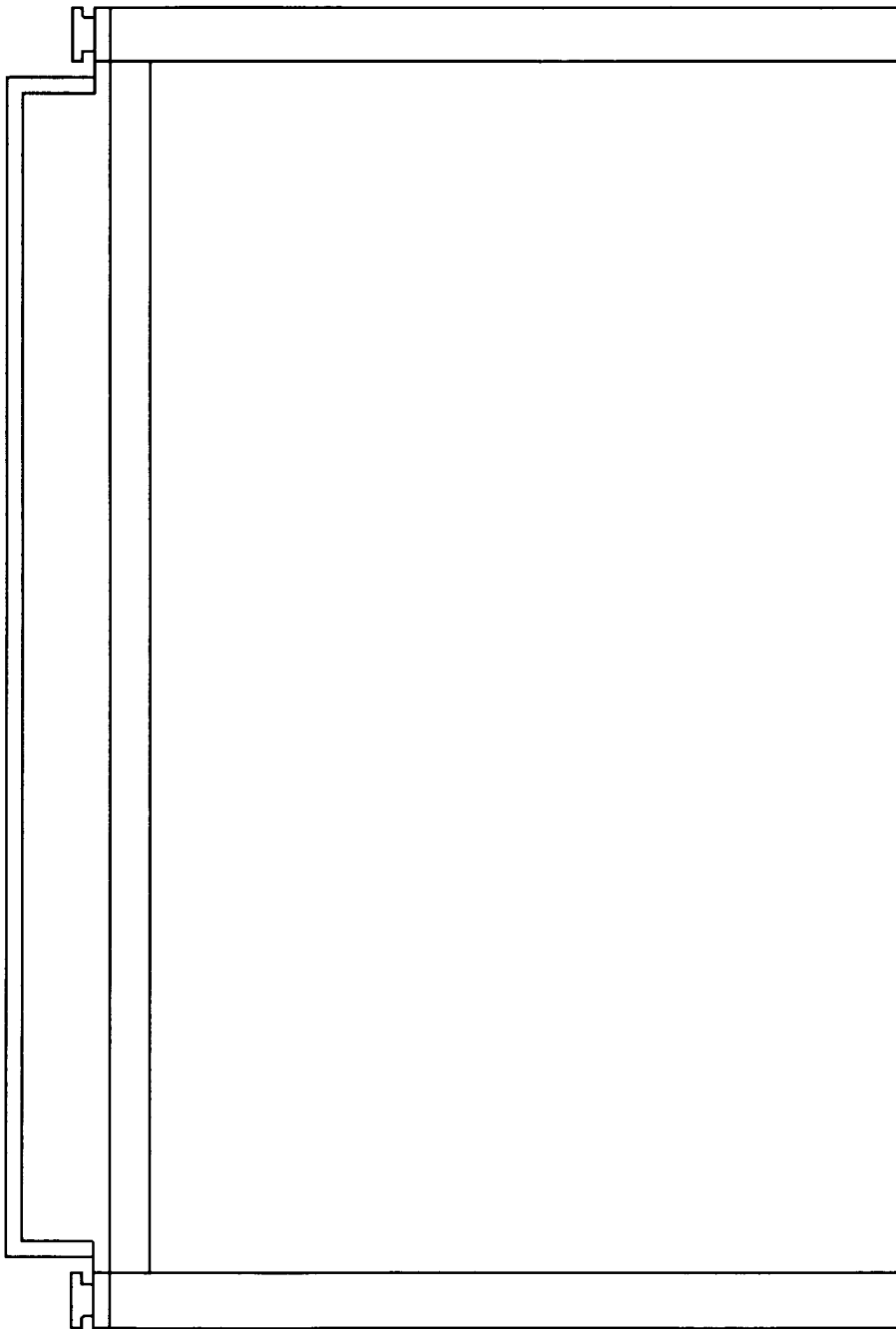


FIG. 18A: Top view of the left end of a ceiling frame (40 foot collapsible cargo container)

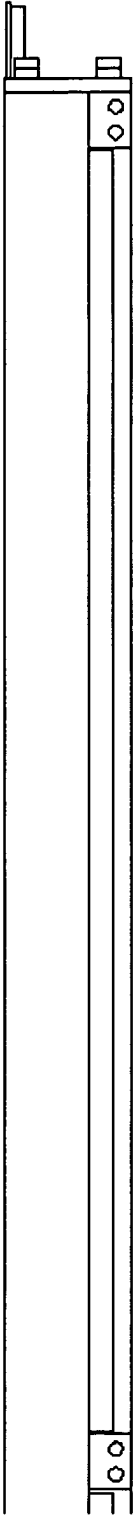


FIG. 19A: Front view of the left end of a ceiling frame (40 foot collapsible cargo container)

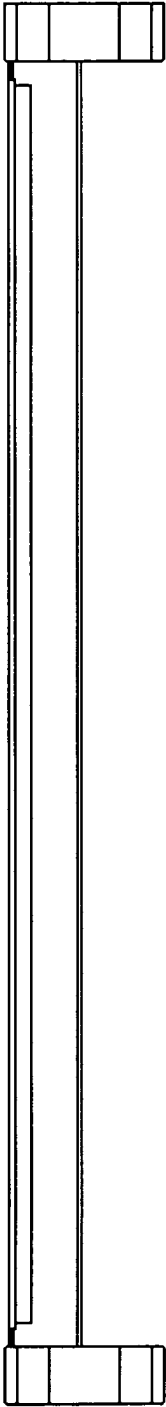


FIG. 20A: Left view of a ceiling frame (40 foot collapsible cargo container)

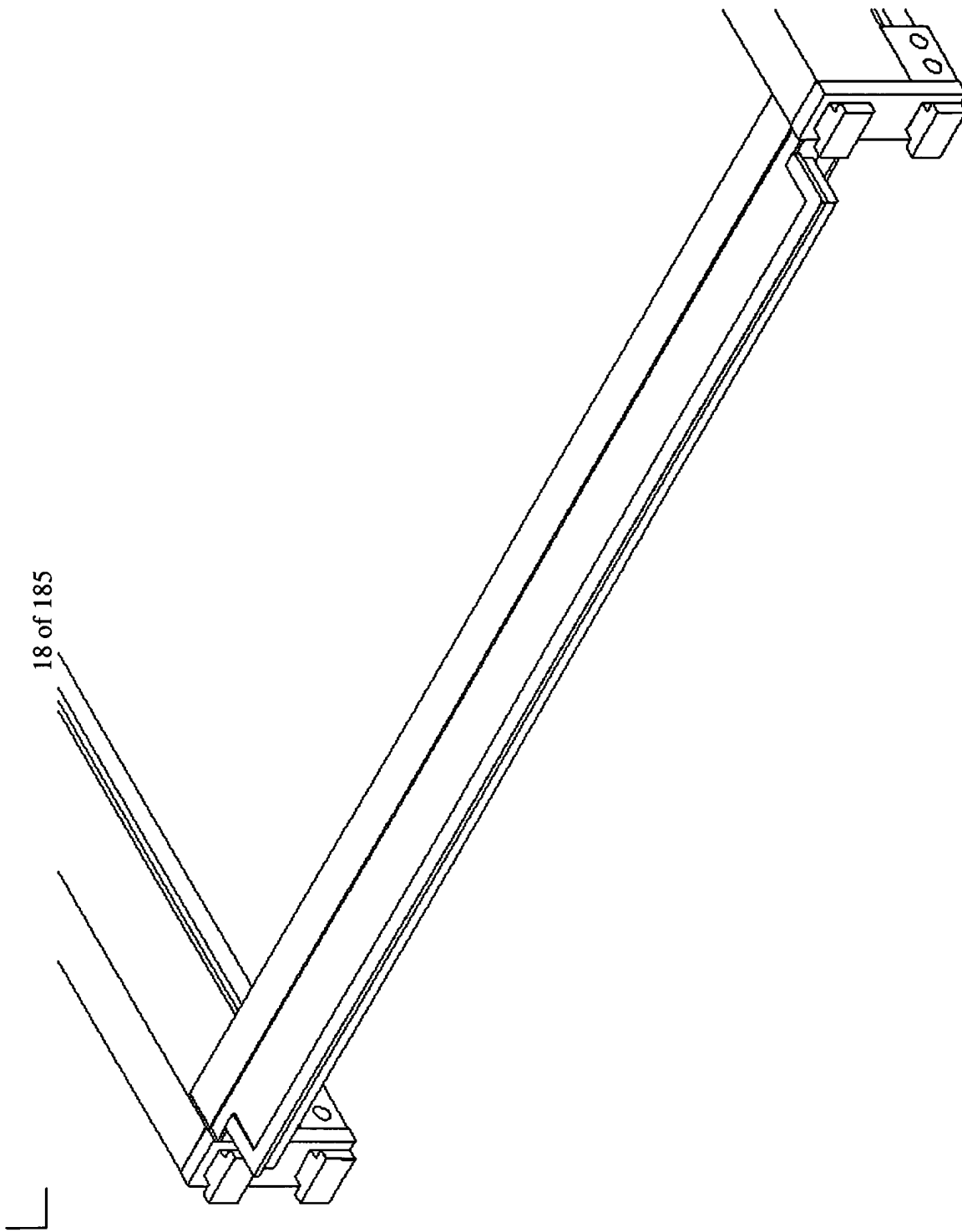


FIG. 21A: Isometric view of the right end of a ceiling frame (40 foot collapsible cargo container)

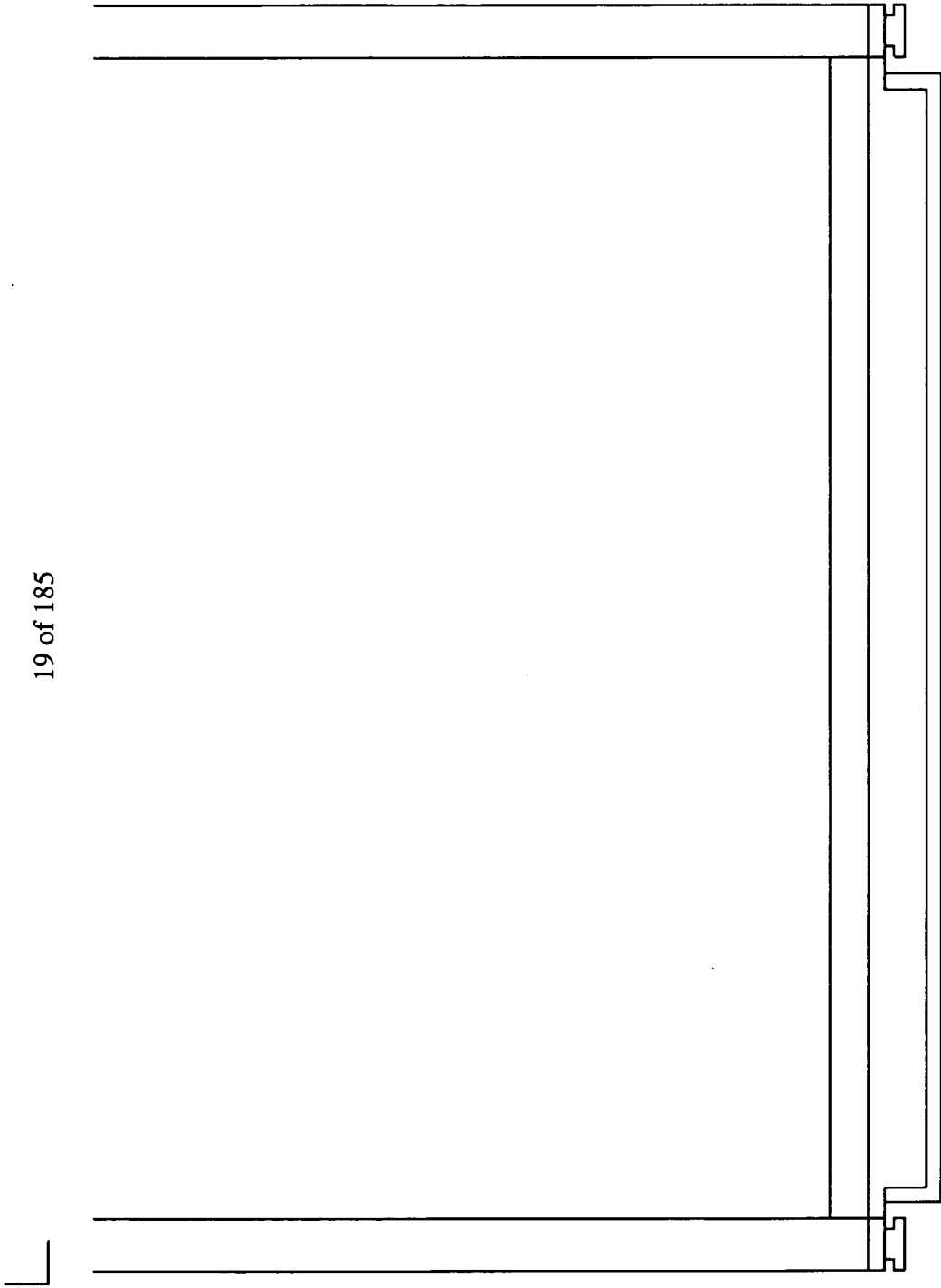


FIG. 22A: Top view of the right end of a ceiling frame (40 foot collapsible cargo container)



FIG. 23A: Front view of the right end of a ceiling frame (40 foot collapsible cargo container)

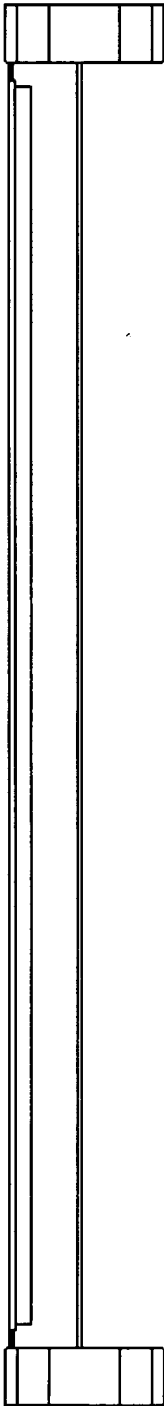


FIG. 24A: Right view of a ceiling frame (40 foot collapsible cargo container)

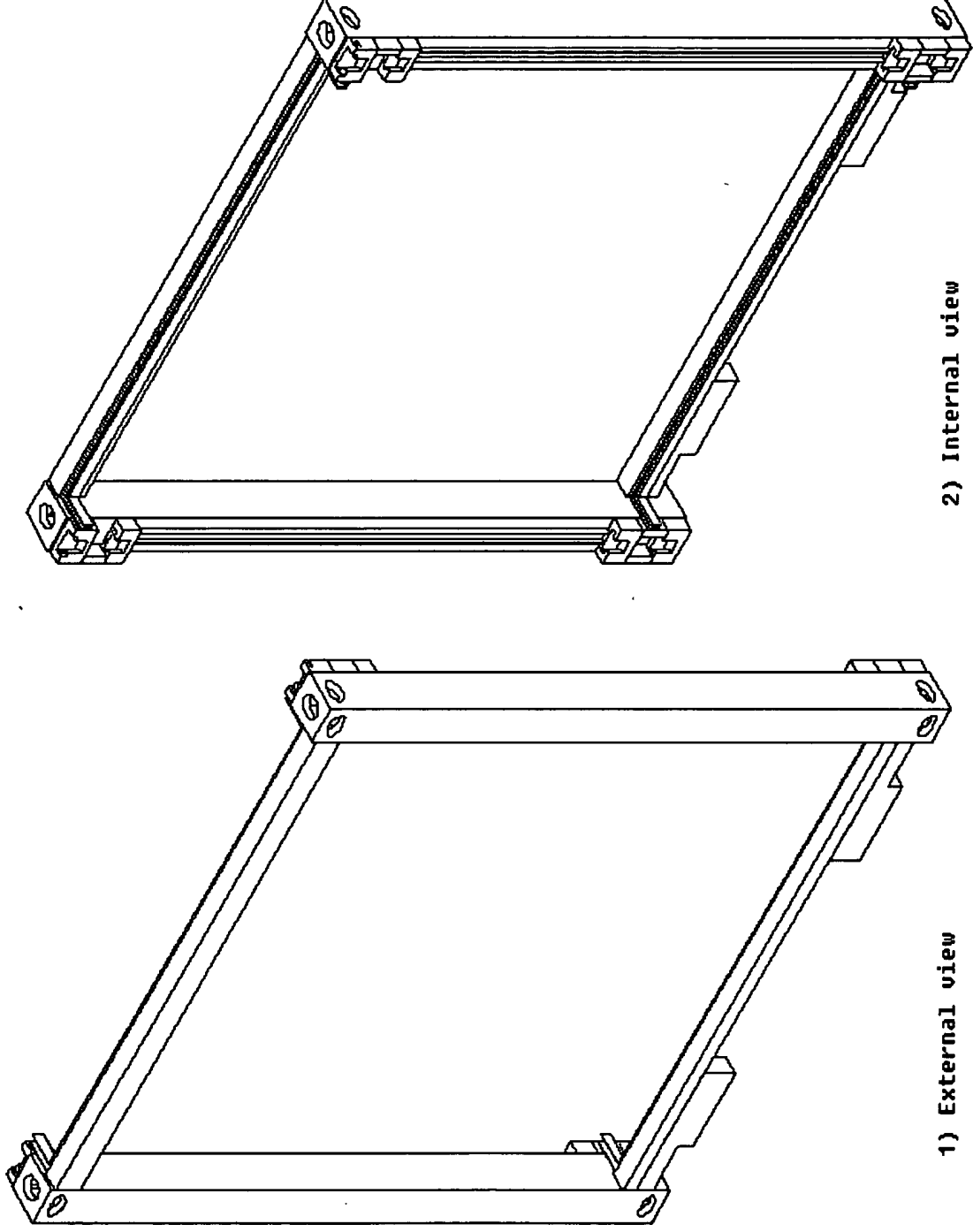


FIG. 25A: Isometric views of a left frame (40 foot collapsible cargo container)

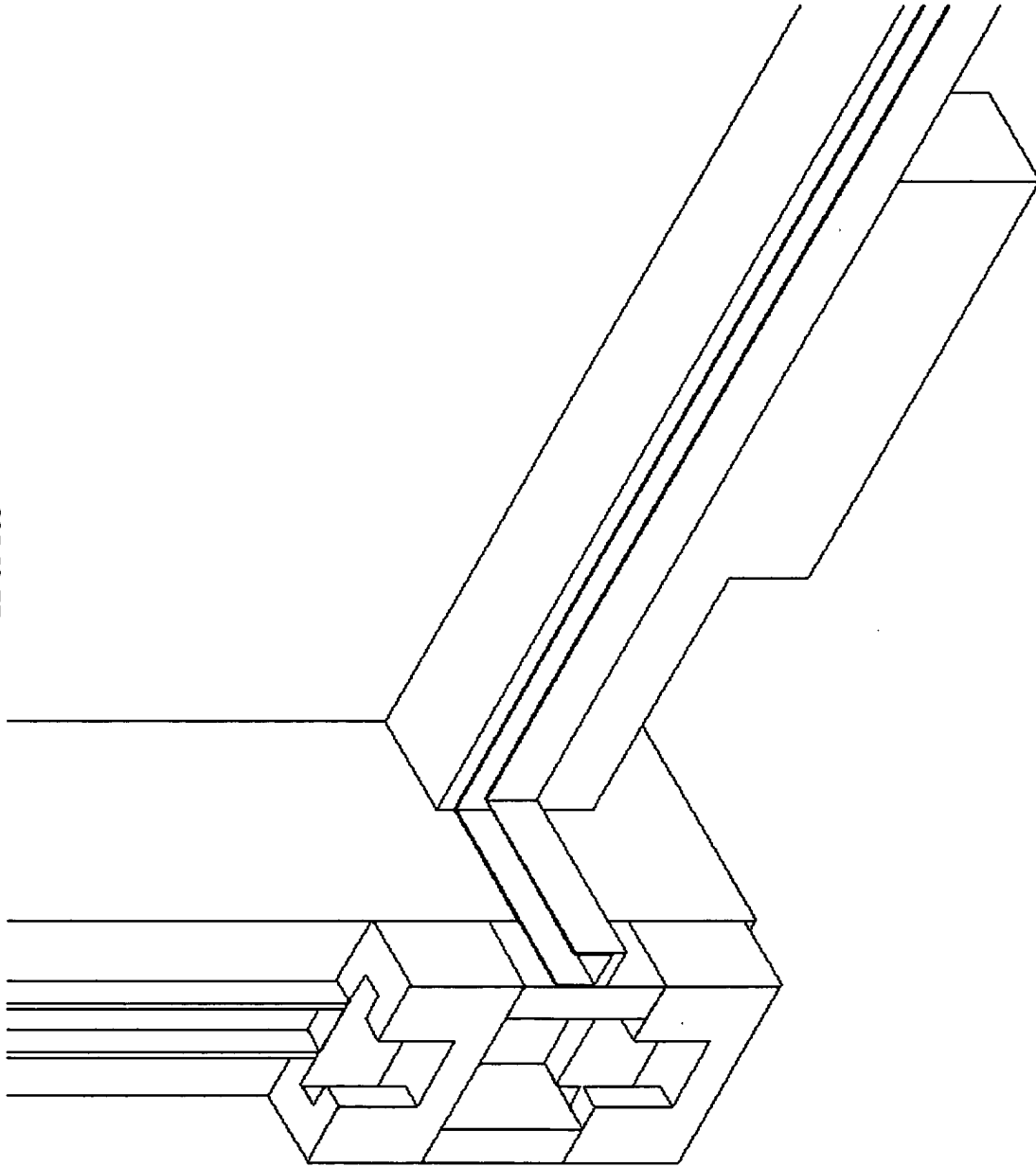


FIG. 26A: Isometric internal view of the corner of a left frame (40 foot collapsible cargo container)

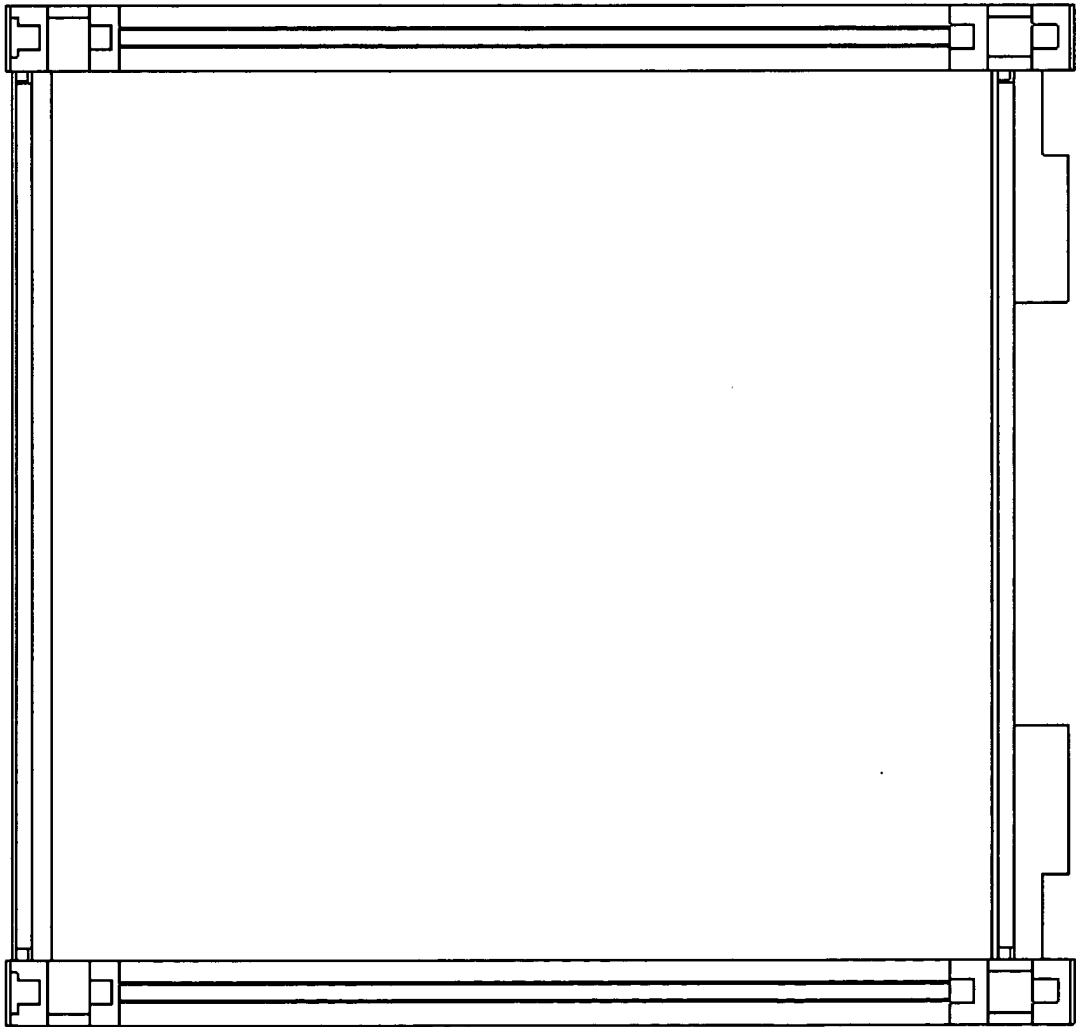


FIG. 27A: Internal view of a left frame (40 foot collapsible cargo container)

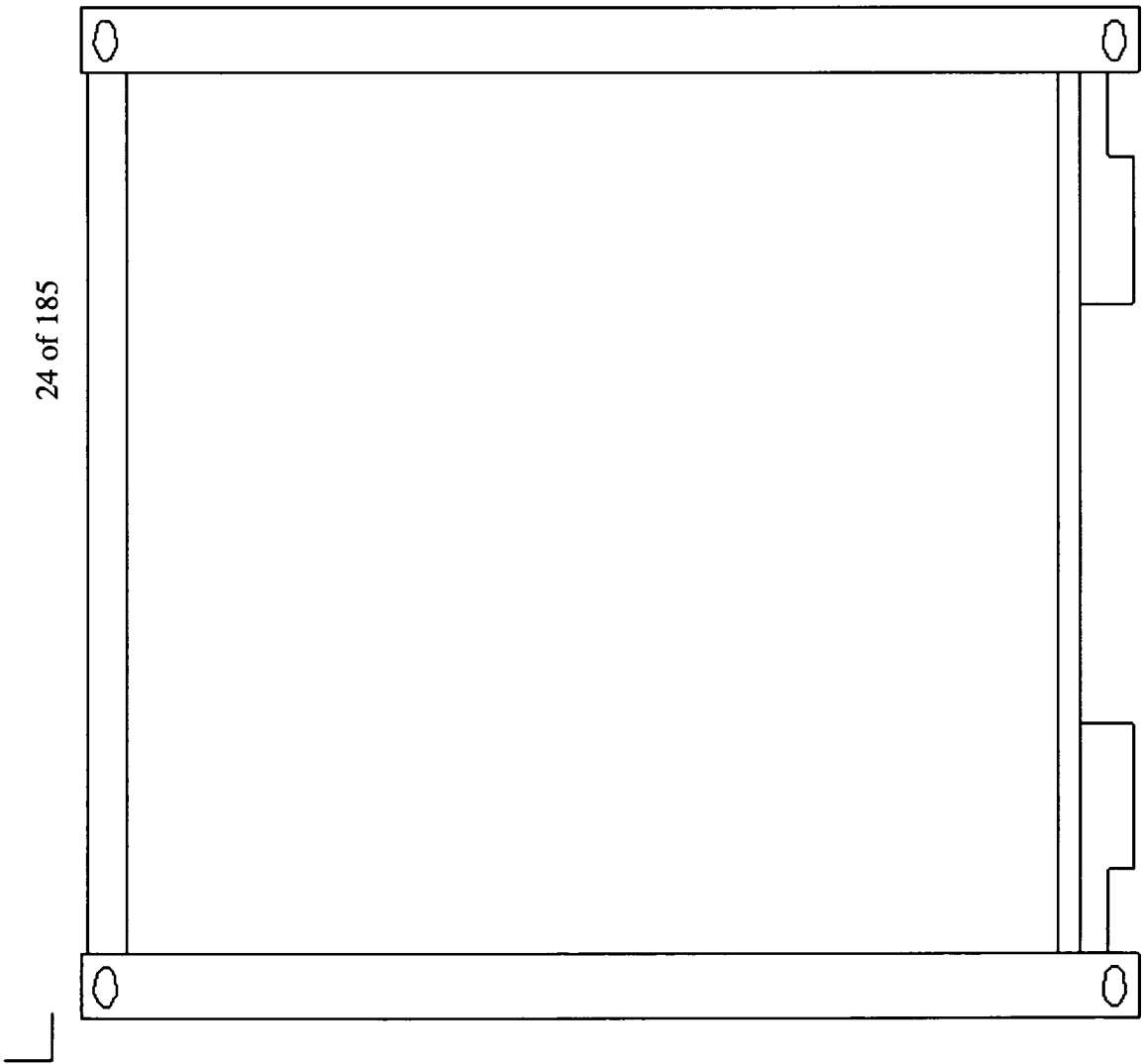


FIG. 28A: External view of a left frame (40 foot collapsible cargo container)

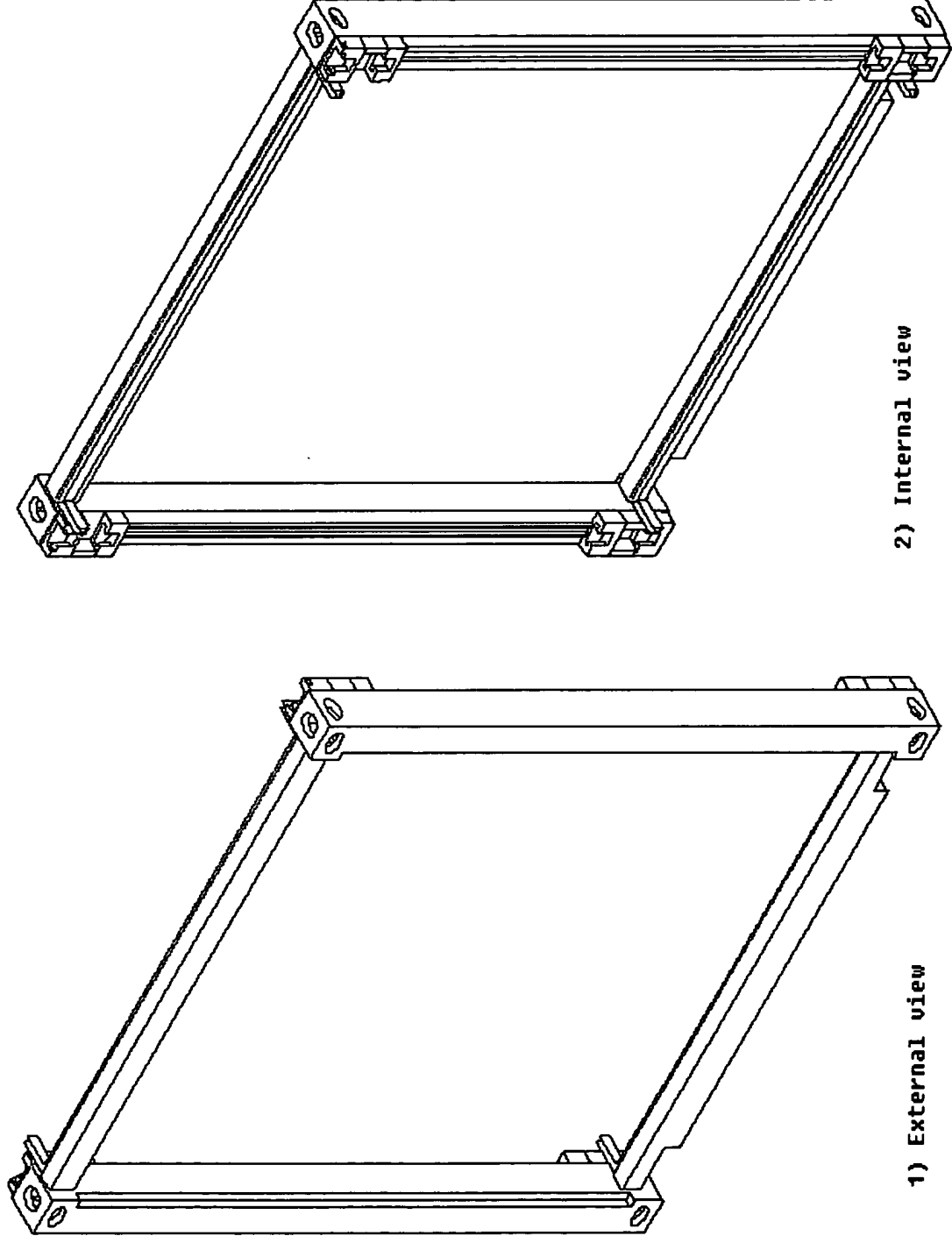


FIG. 29A: Isometric views of a right frame (40 foot collapsible cargo container)

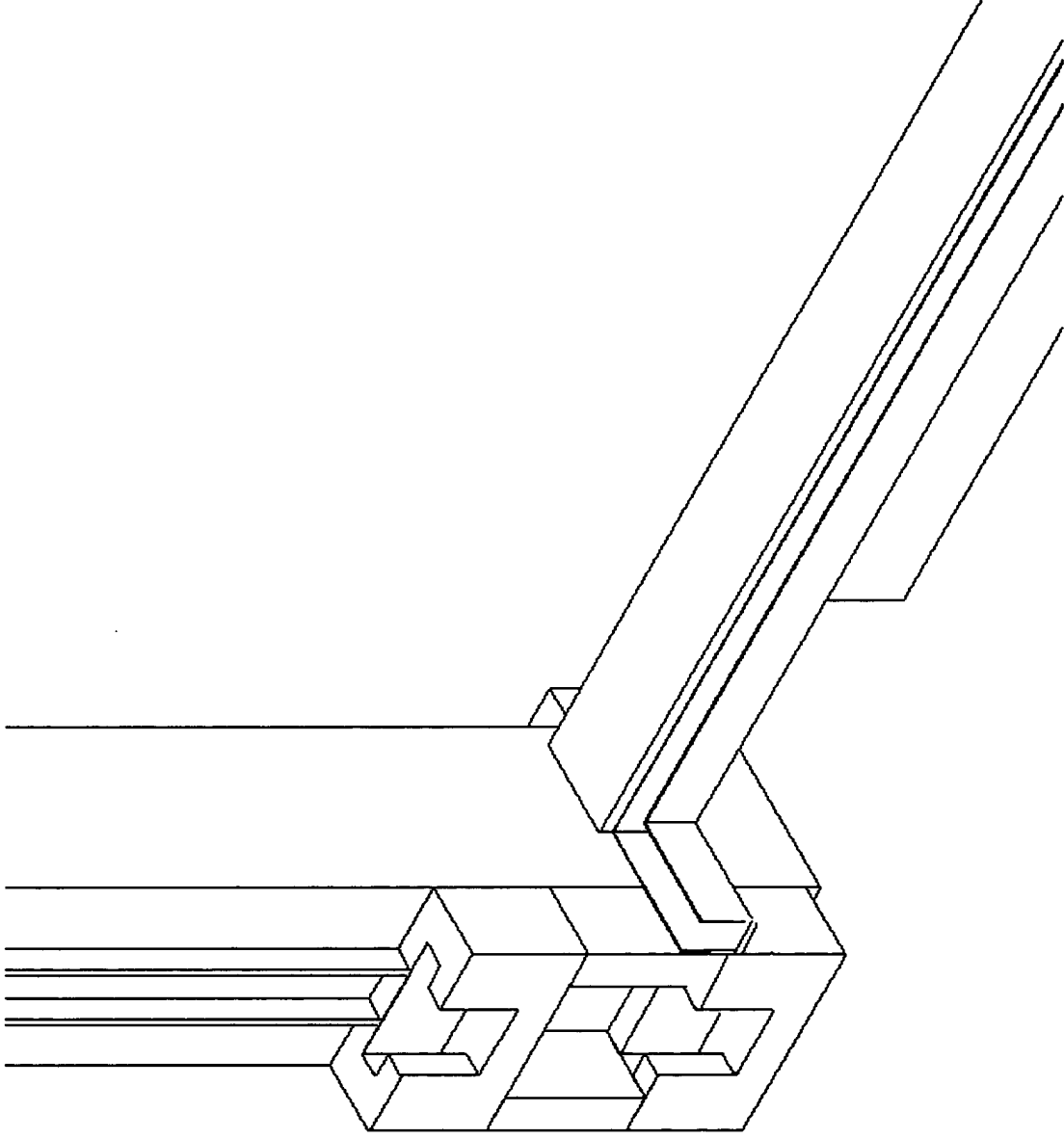


FIG. 30A: Isometric internal view of the corner of a right frame (40 foot collapsible cargo container)

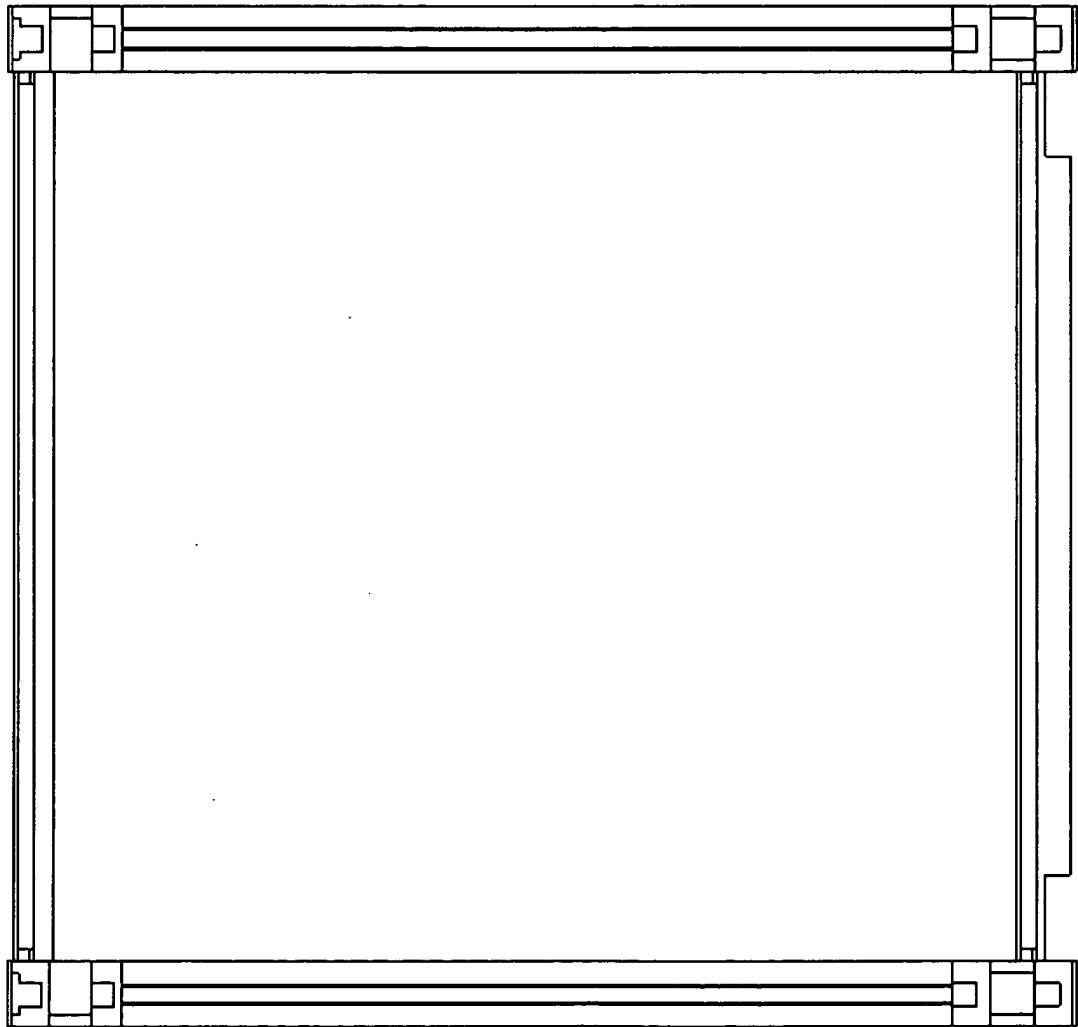


FIG. 31A: Internal view of a right frame (40 foot collapsible cargo container)

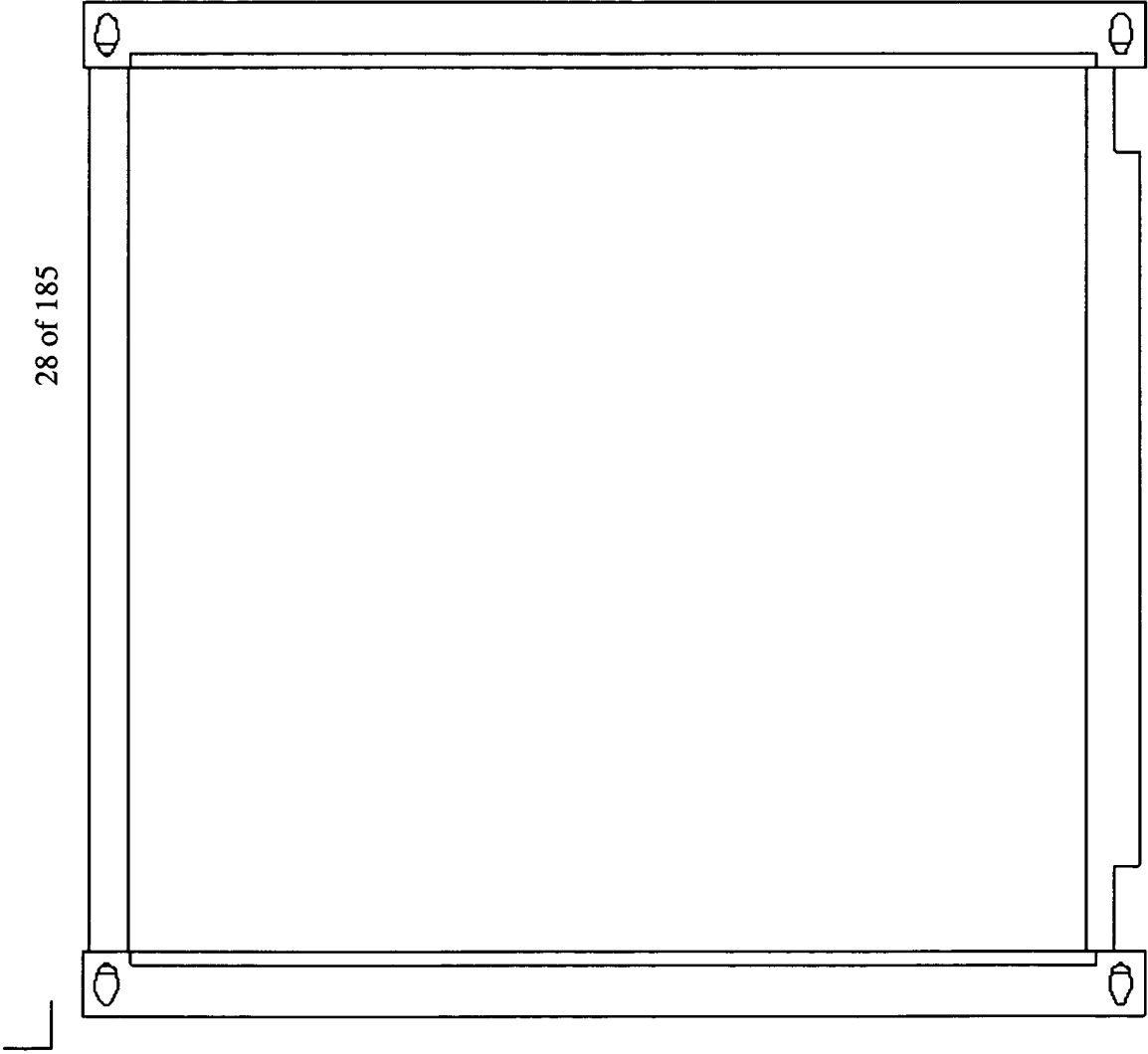


FIG. 32A: External view of a right frame (40 foot collapsible cargo container)

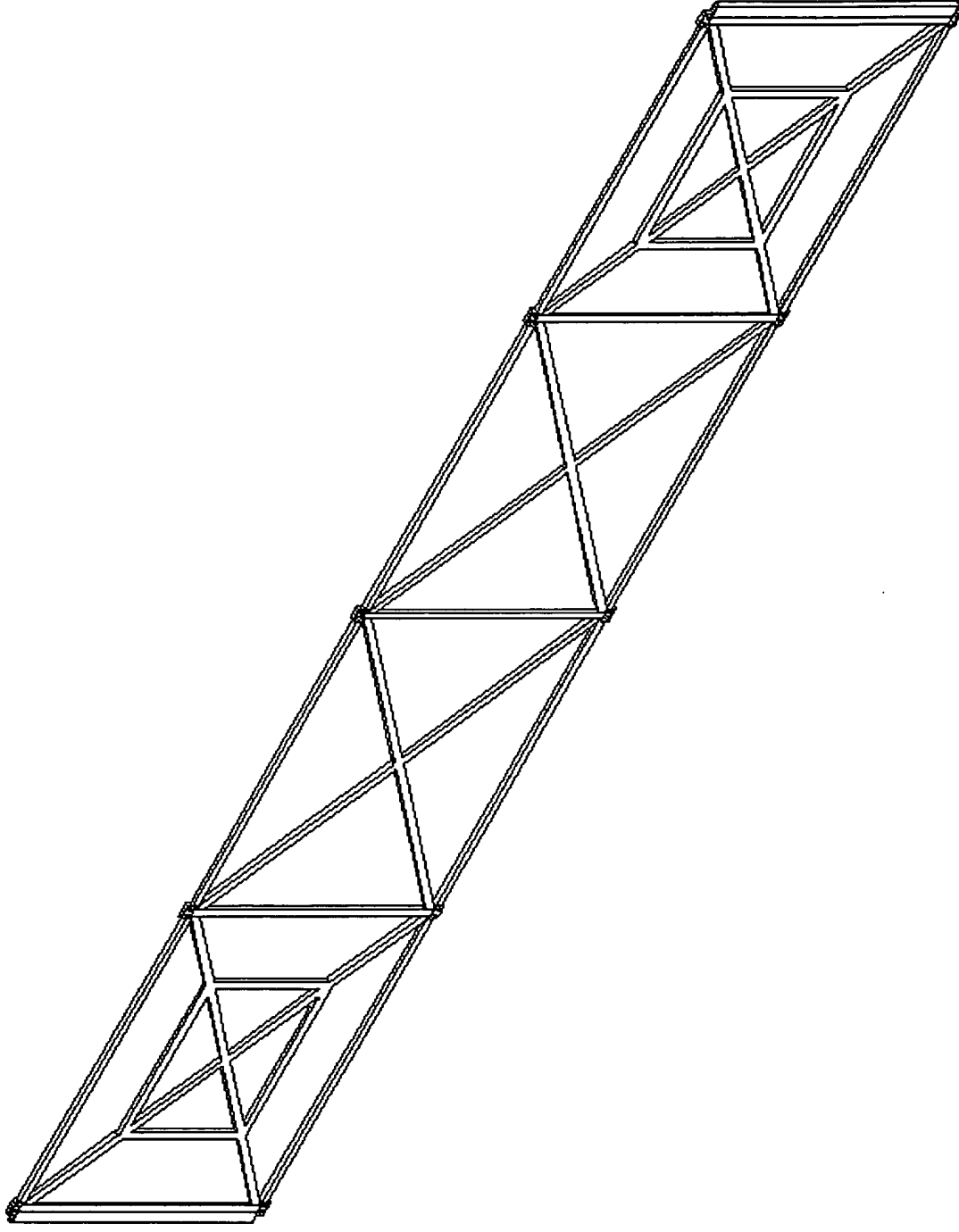


FIG. 33A/B: Isometric view of the front/back frame (40 foot and 40 foot high cube containers)

COLLAPSIBLE CARGO CONTAINER
Dennis Zhu Ouyang 847-781-5319

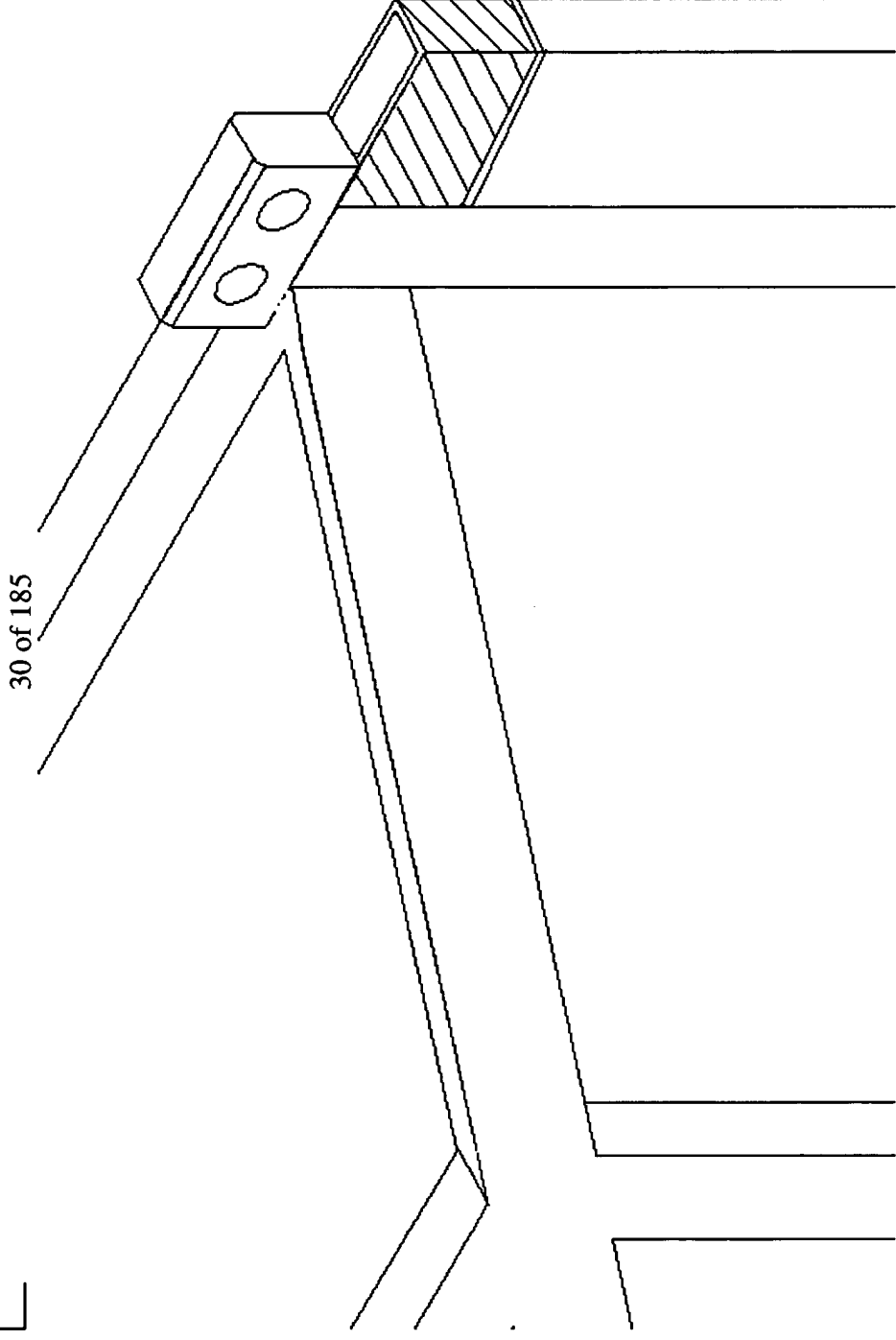


FIG. 34A/B: Isometric view of the top corner of a front/back frame (40 foot and 40 foot high cube containers)

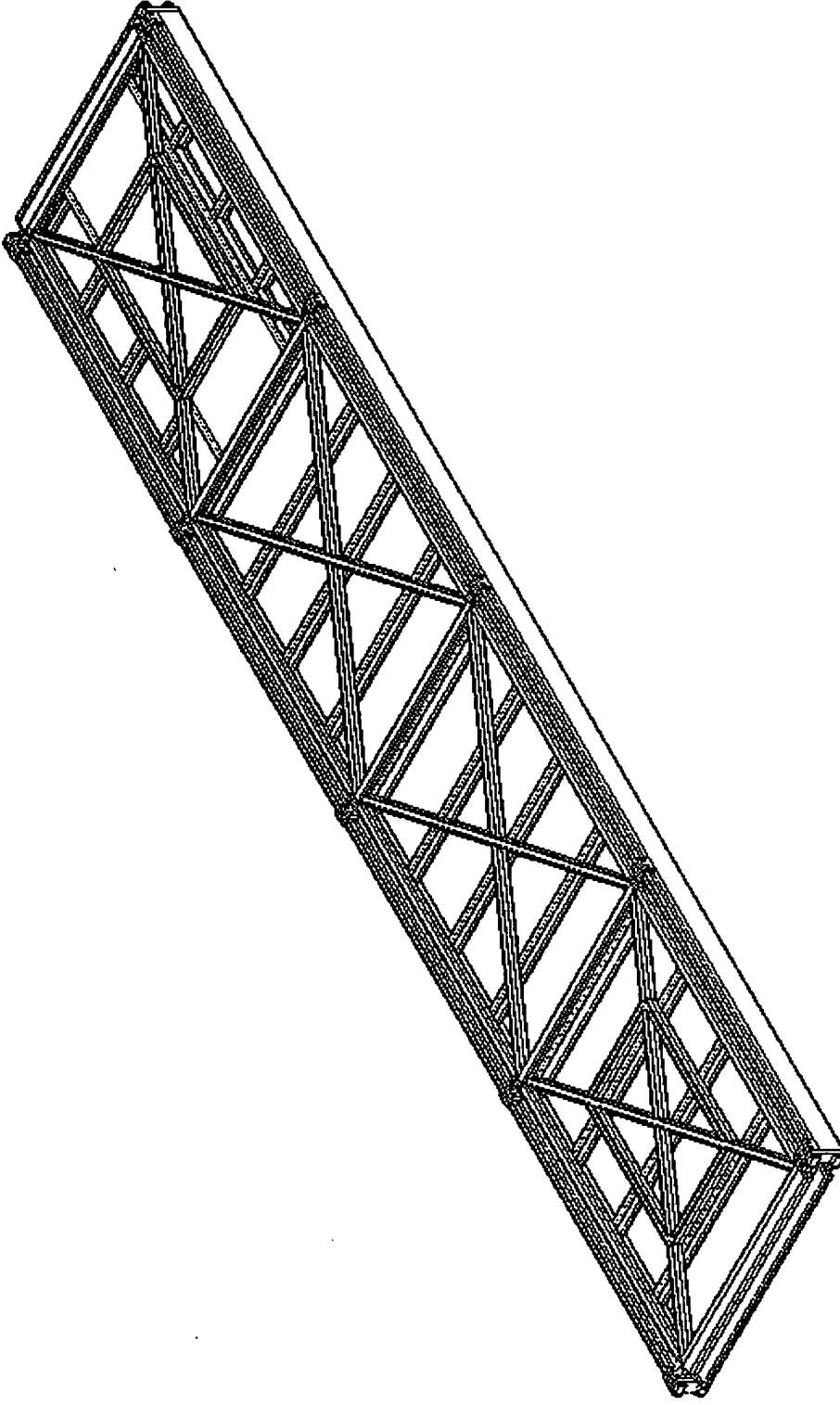


FIG. 35A: Isometric view of a floor frame that contains a front frame and a back frame (40 foot collapsible cargo container)

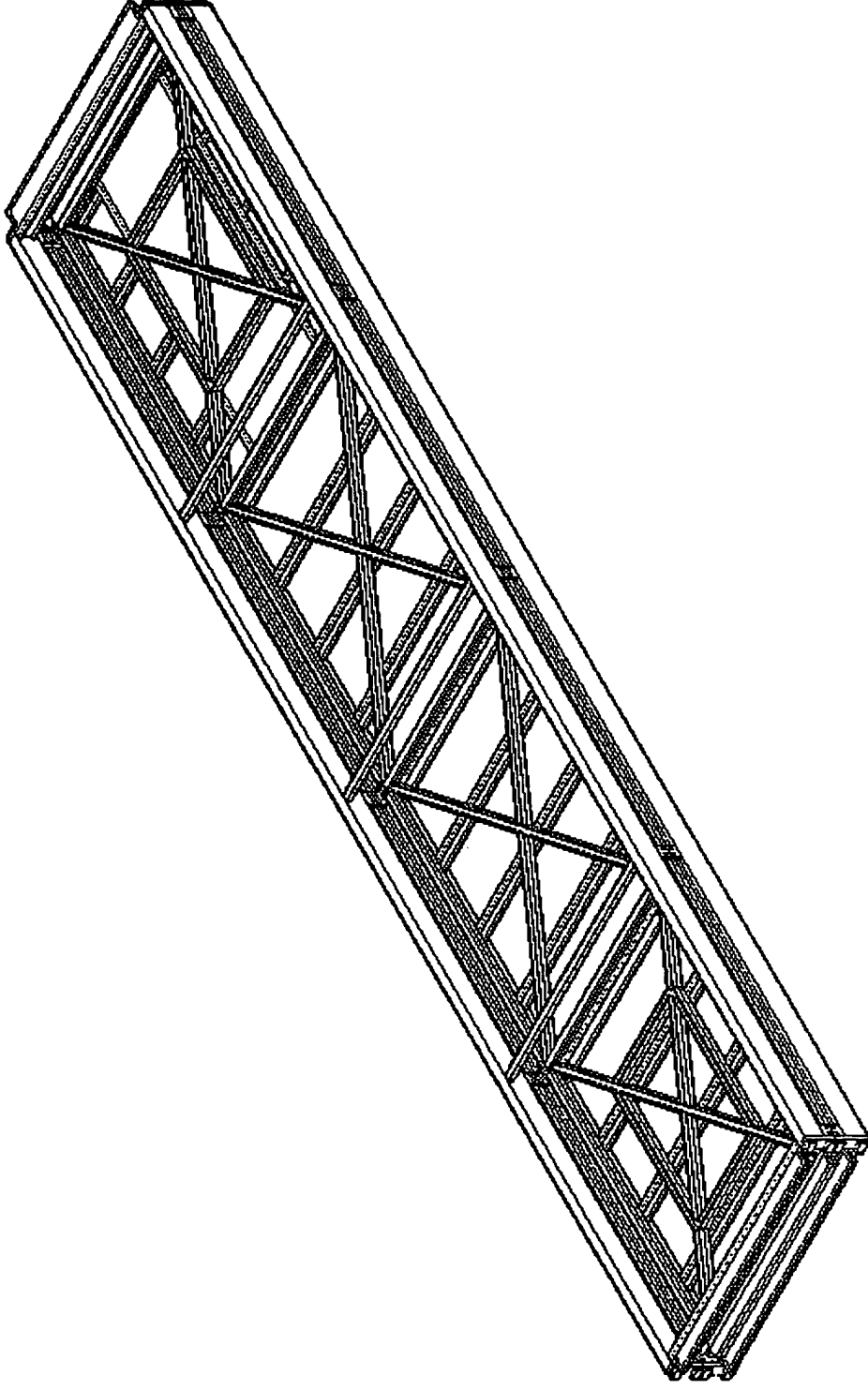


FIG. 36A: Isometric view of a ceiling frame stacked on top of a floor frame that contains a front frame and a back frame (40 foot collapsible cargo container). This assembly is now referred as "collapsible cargo container frame panel assembly".

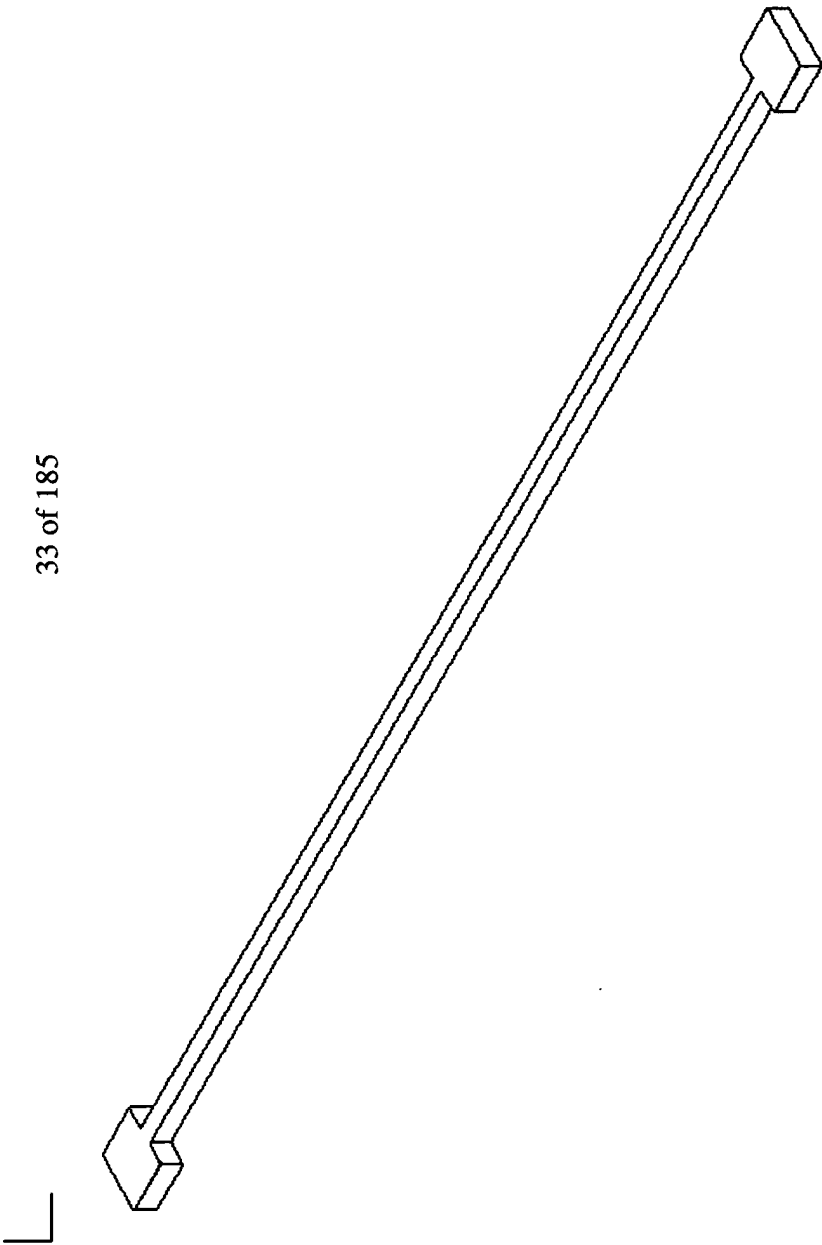


FIG. 37: Isometric view of the base part

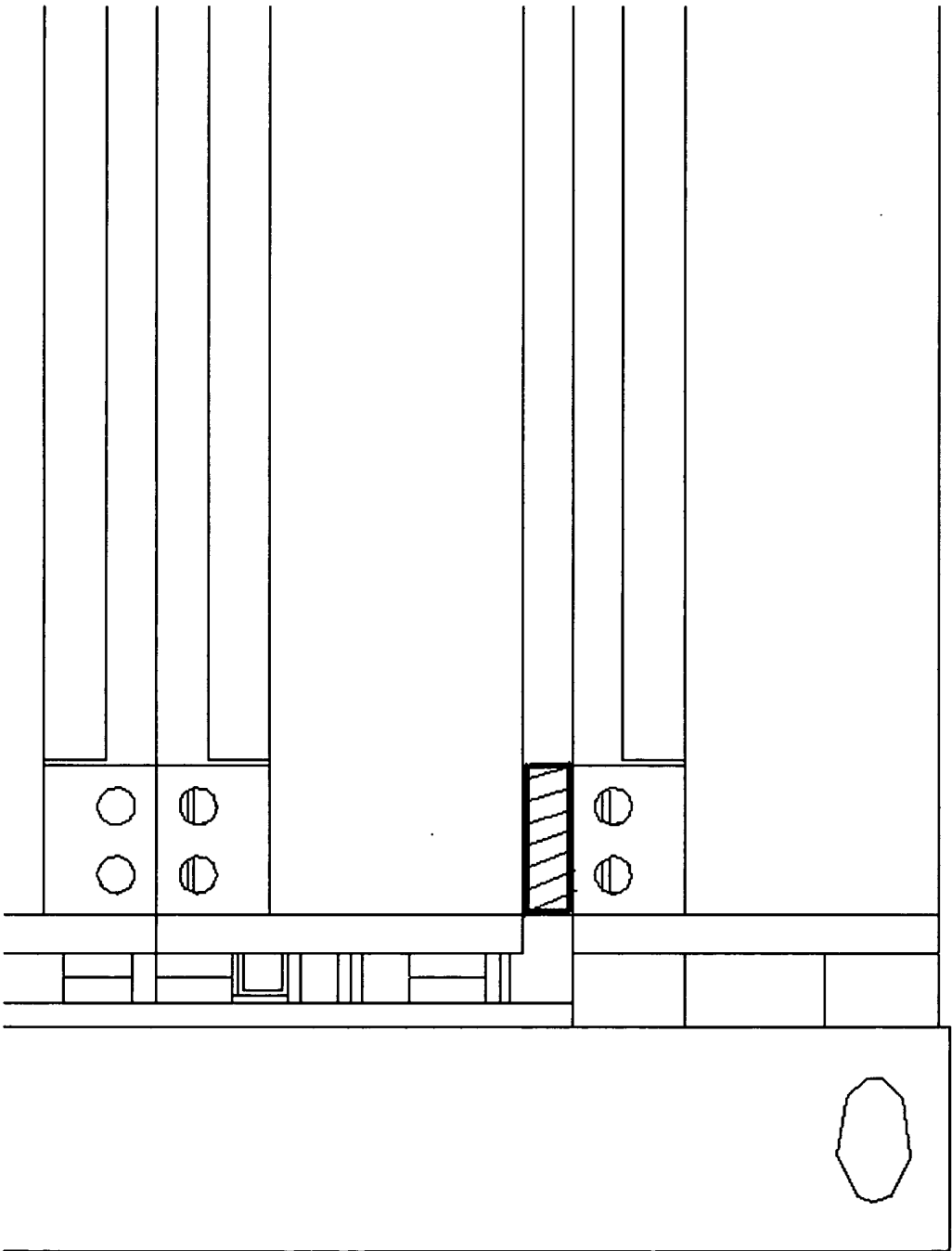


FIG. 38: Enlarged front view of a loaded collapsible cargo container, also referred as shipping container. The shaded lines indicate the base part. The base parts are placed on top of the shipping container's floor frame base at both ends to support disassembled frame panels.

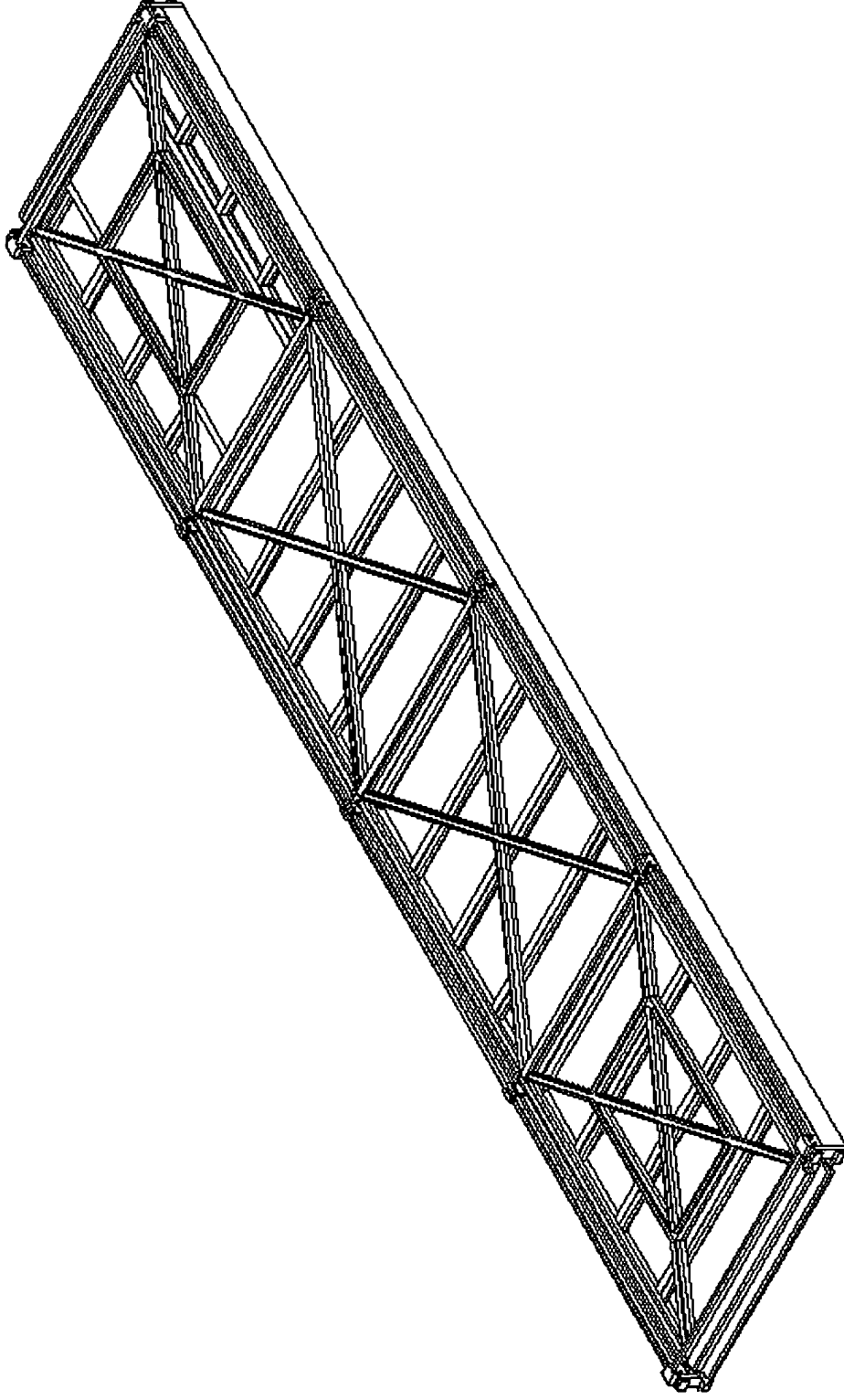


FIG. 39 A/C/D: Step1 of disassemble and load process: The front and back frames of the 40 foot shipping collapsible cargo container are stored in its own floor frame, and a base part is placed on each end. This shipping collapsible cargo container floor frame panel is now referred as "shipping floor frame panel".

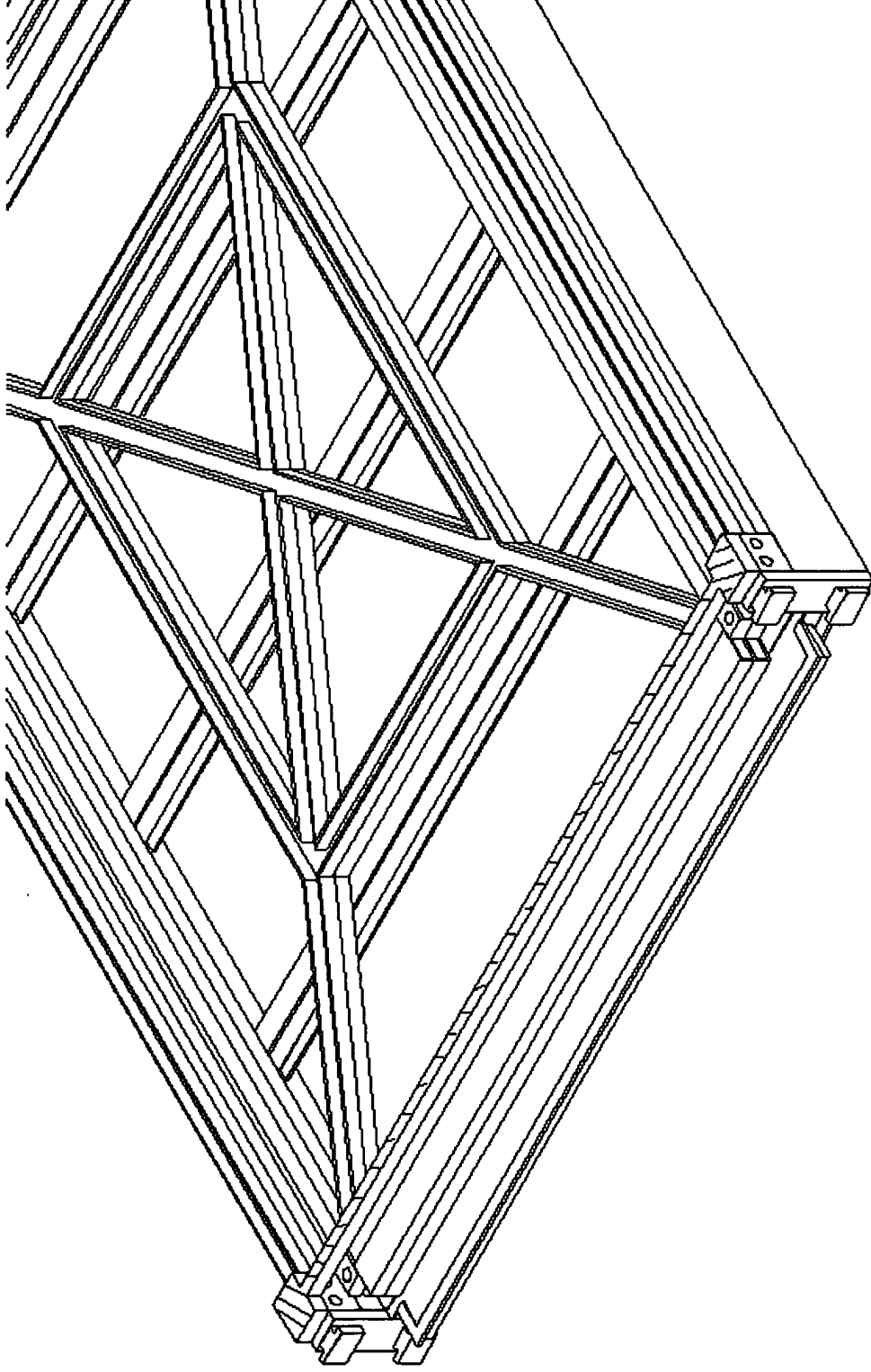


FIG. 40A/C/D: Enlarged view based on FIG. 39A/C/D to show the base part position indicated by shaded lines

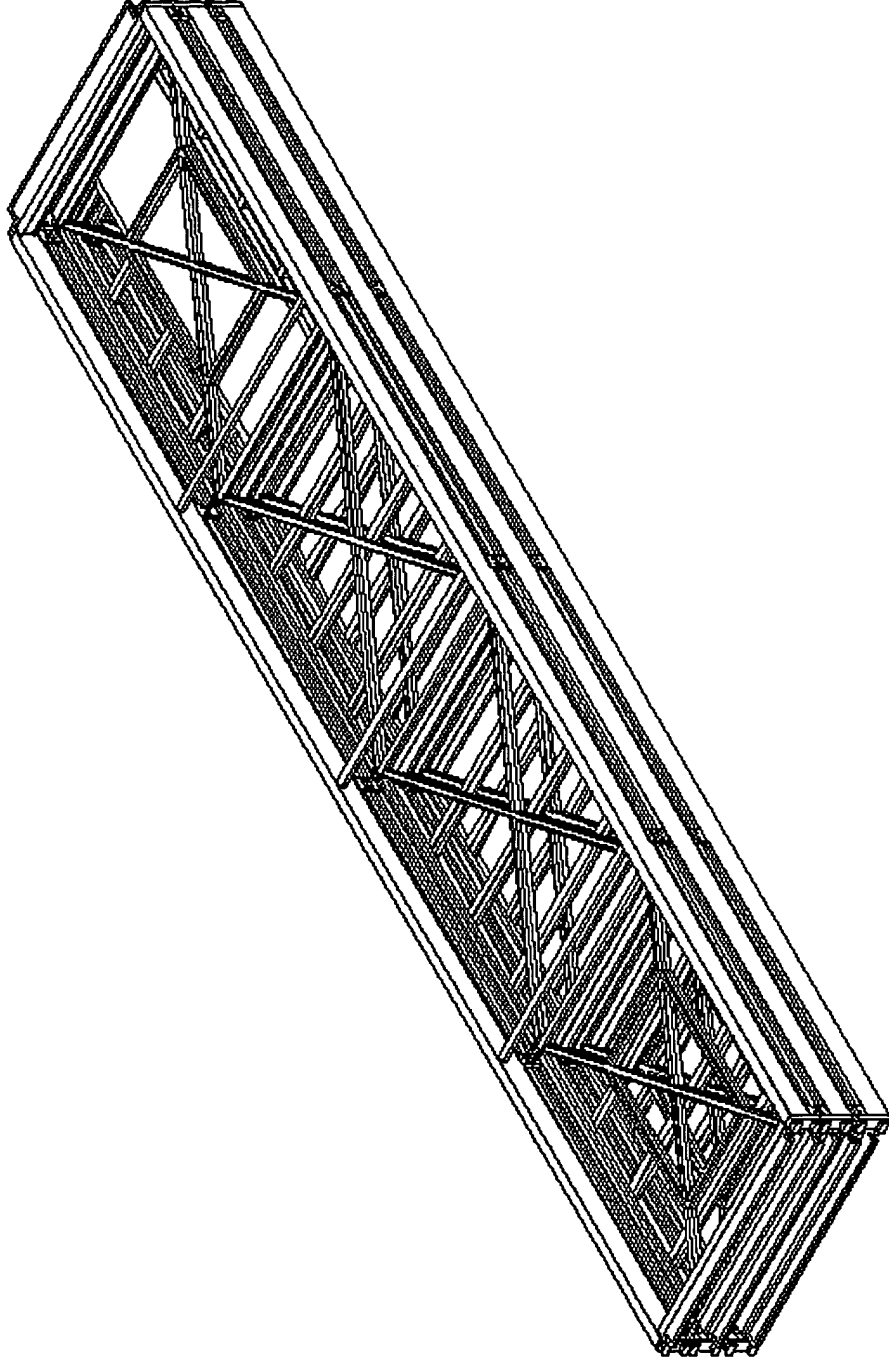


FIG. 41A: Step2 of disassemble and load process: The first “collapsible cargo container frame panel assembly” is stacked on top of previous assembly.

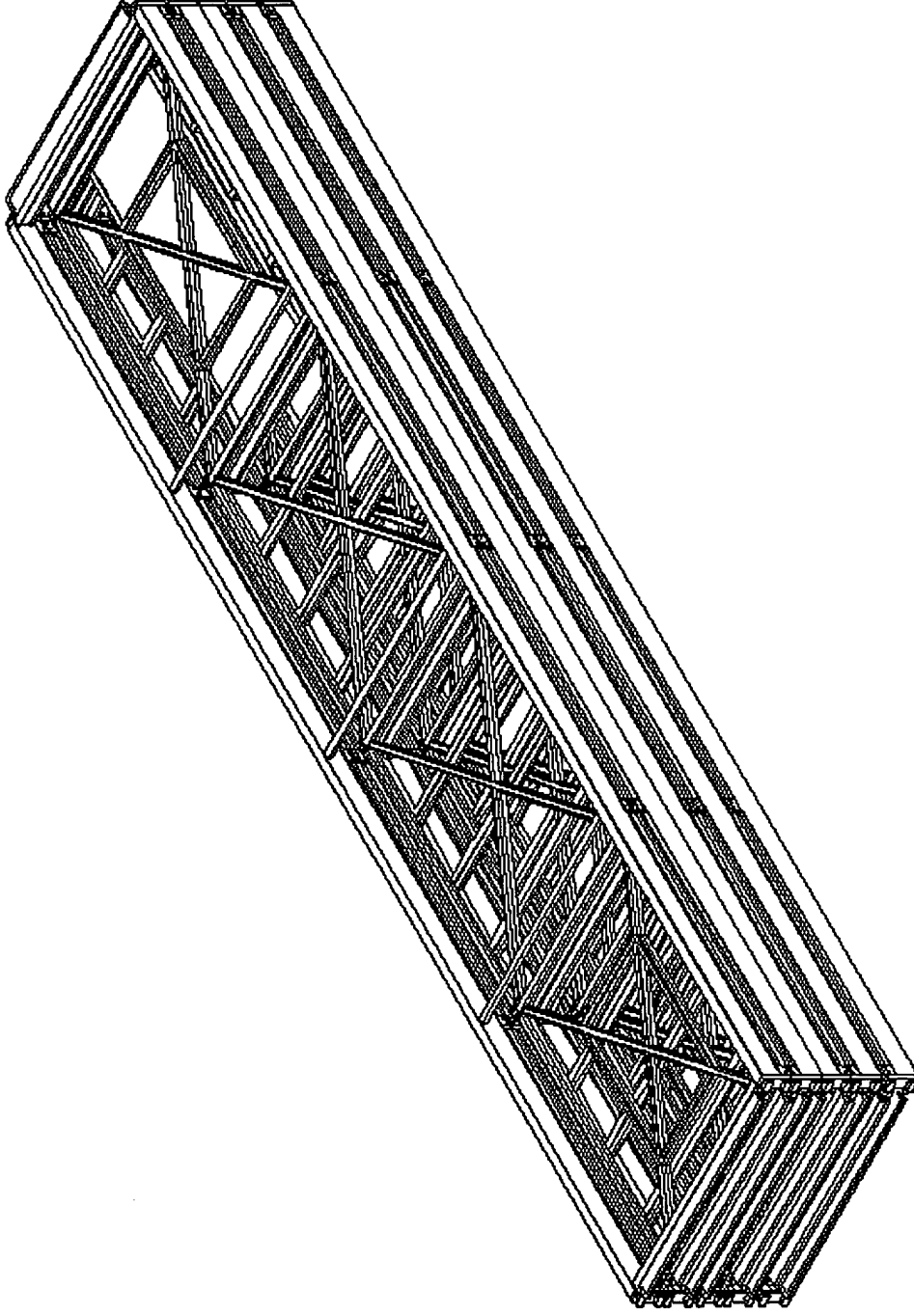


FIG. 42A: Step3 of disassemble and load process: The second “collapsible cargo container frame panel assembly” is stacked on top of previous assembly.

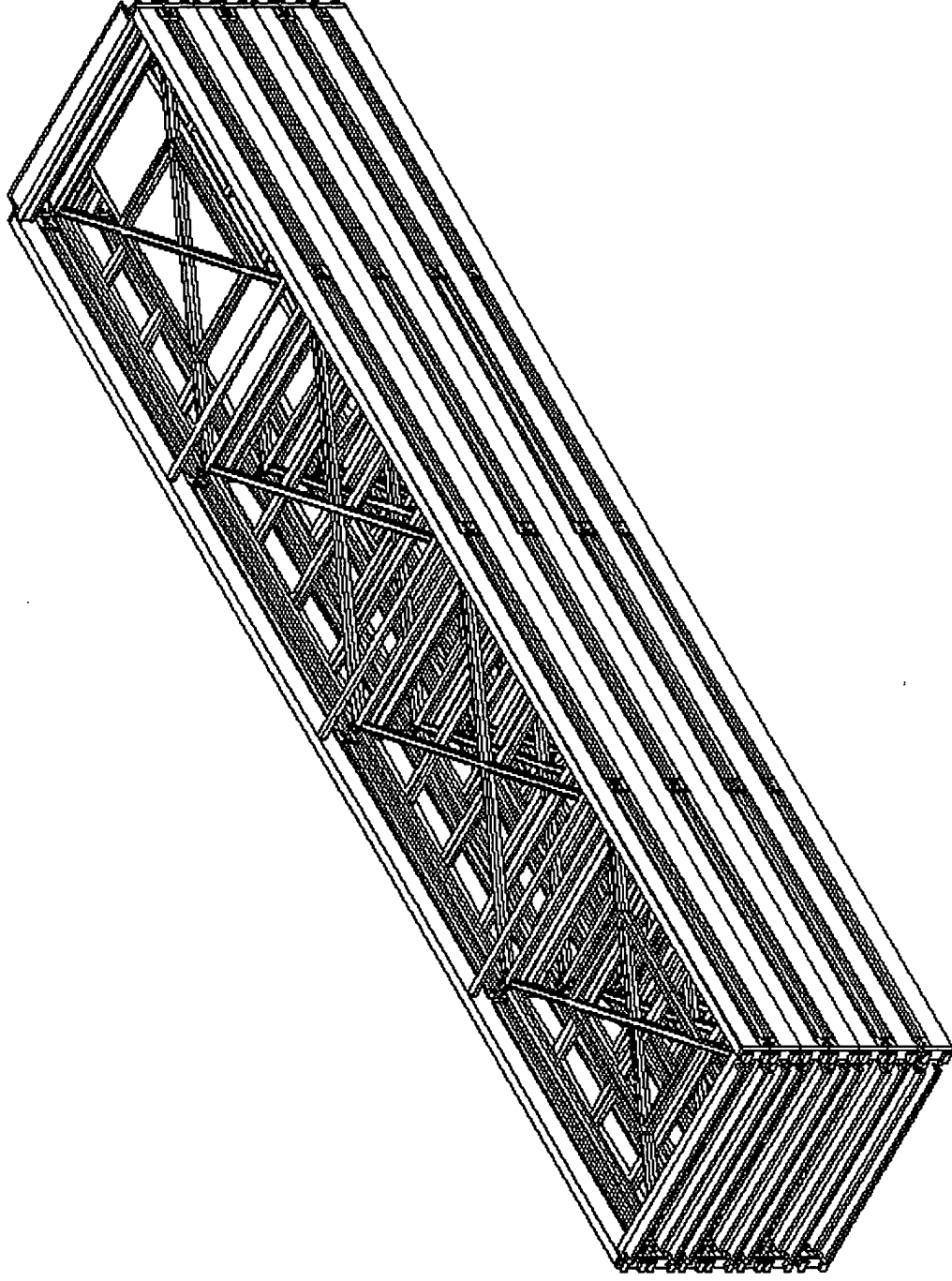


FIG. 43A: Step4 of disassemble and load process: The third "collapsible cargo container frame panel assembly" is stacked on top of previous assembly.

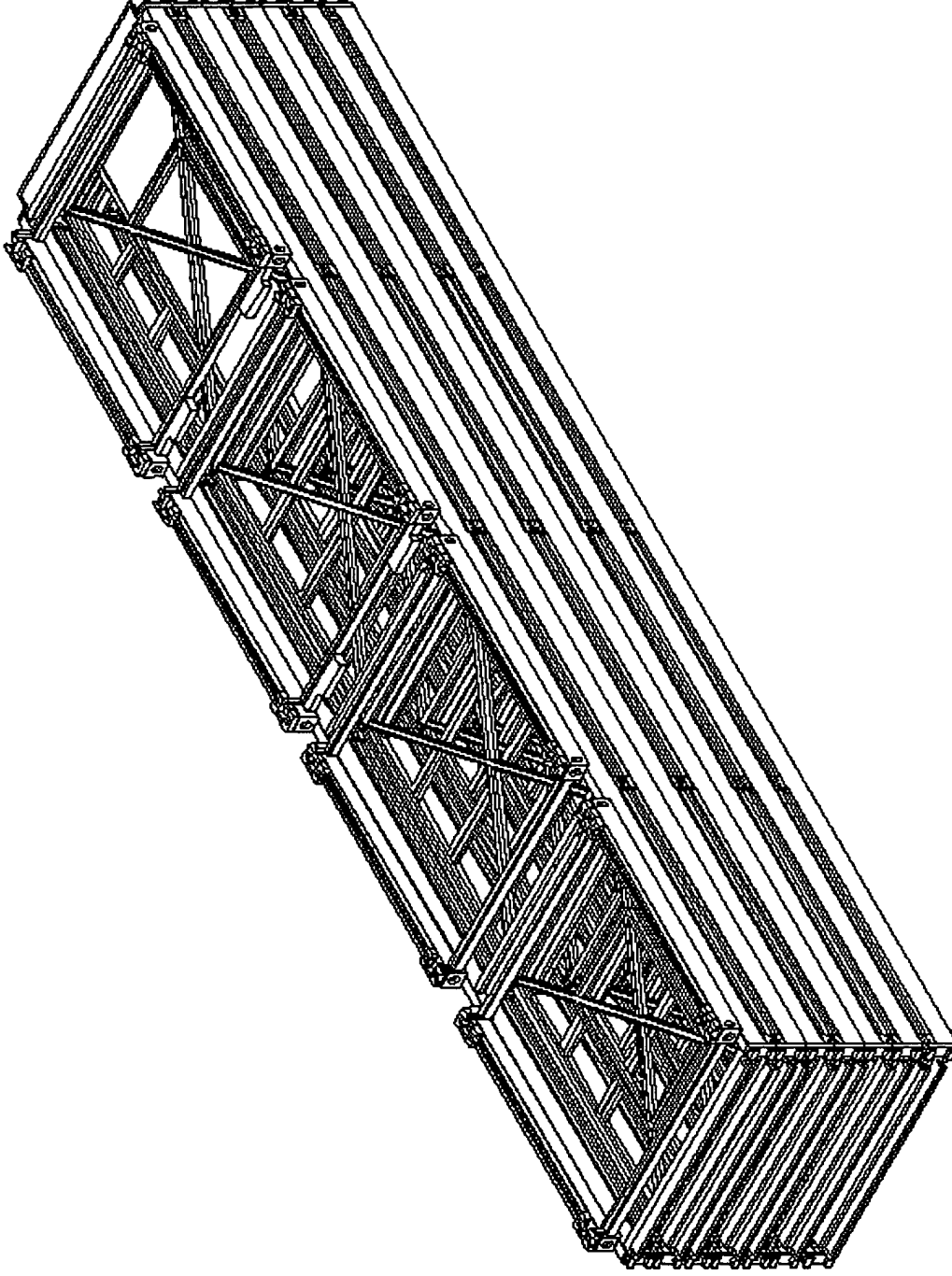


FIG. 44A: Step5 of disassemble and load process: The left and right frames from 2 disassembled cargo containers are stacked on top of the previous assembly.

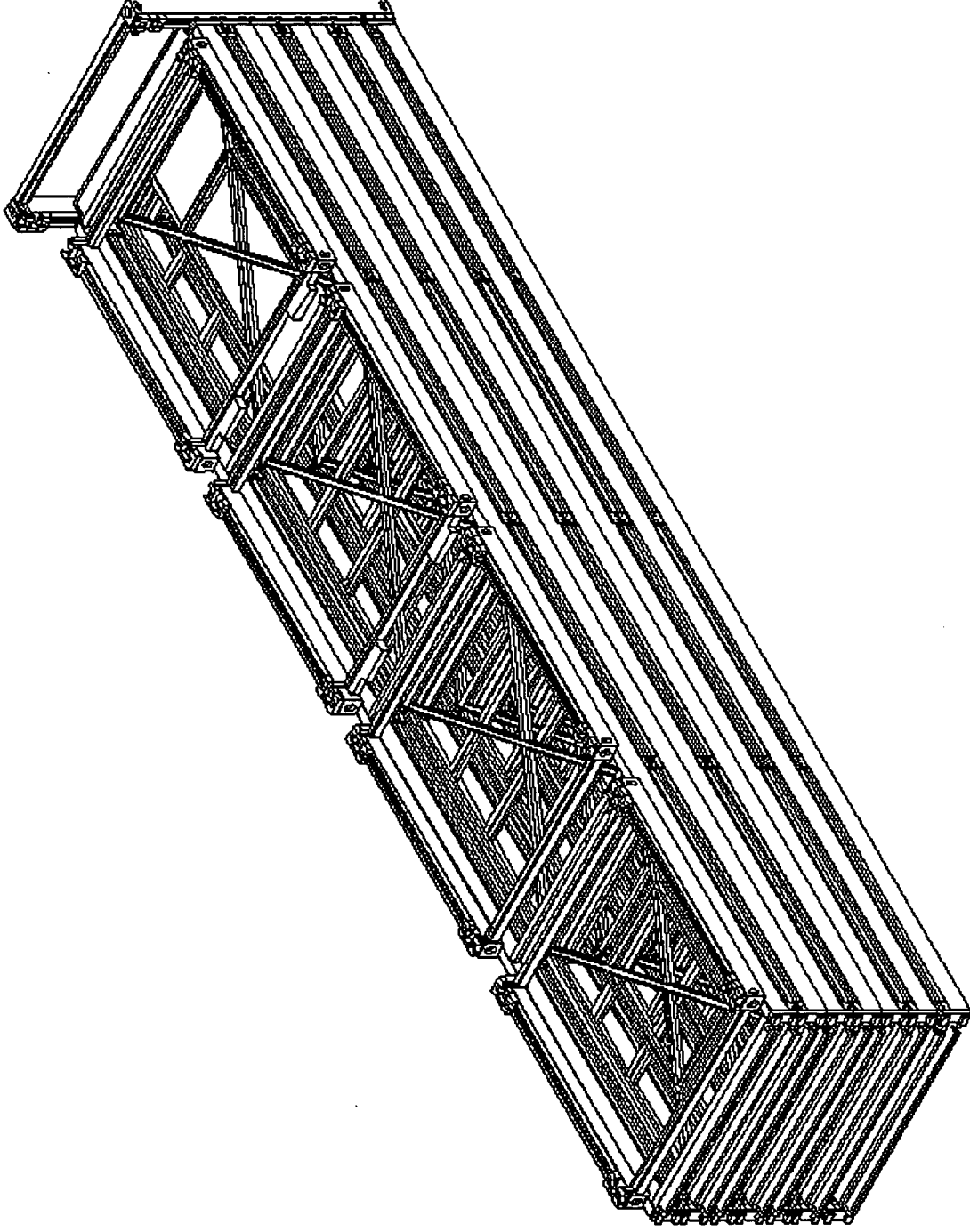


FIG. 45A: Step6 of disassemble and load process: The left frame of the shipping collapsible cargo container is assembled.

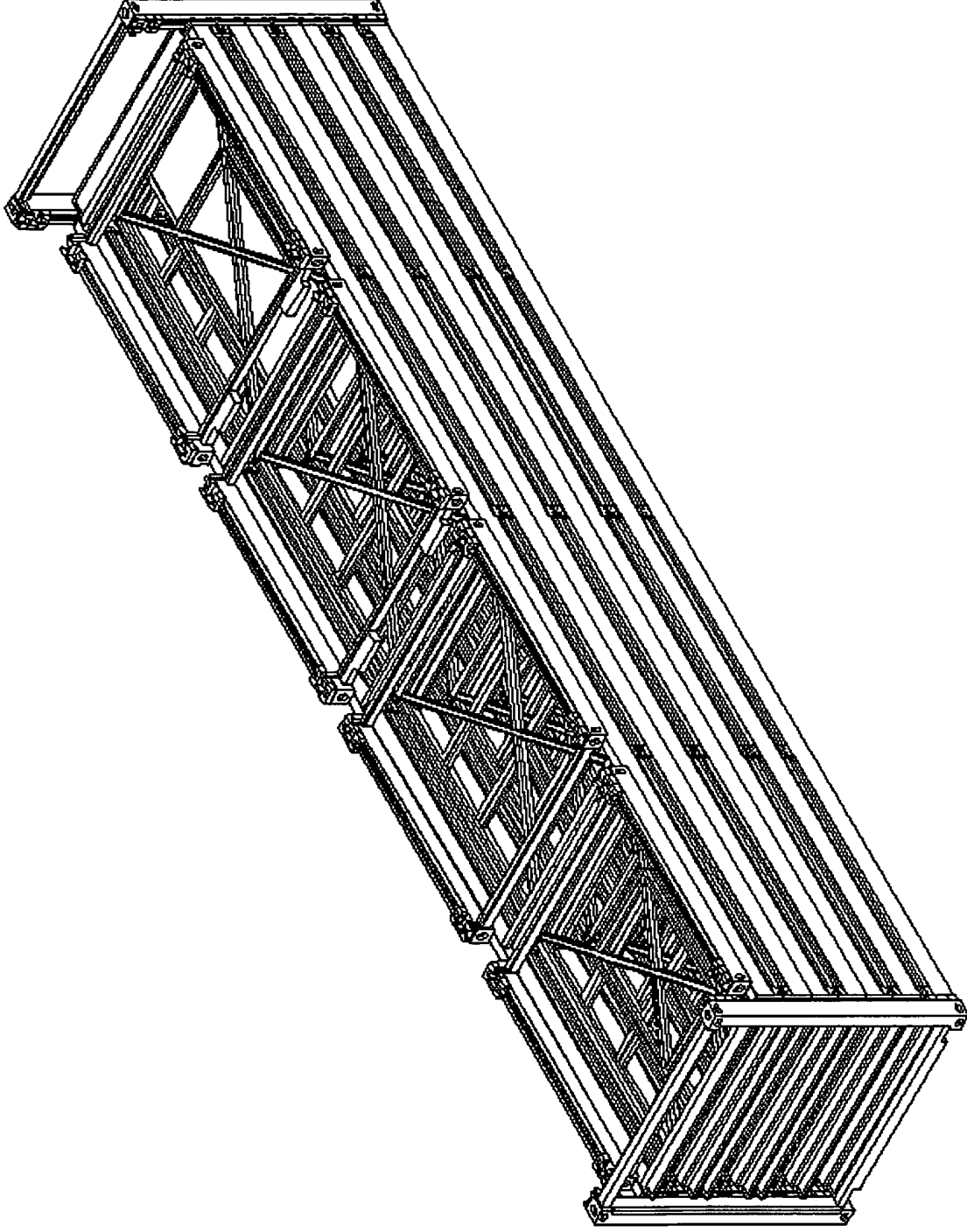


FIG. 46A: Step7 of disassemble and load process: The right frame of the shipping collapsible cargo container is assembled.

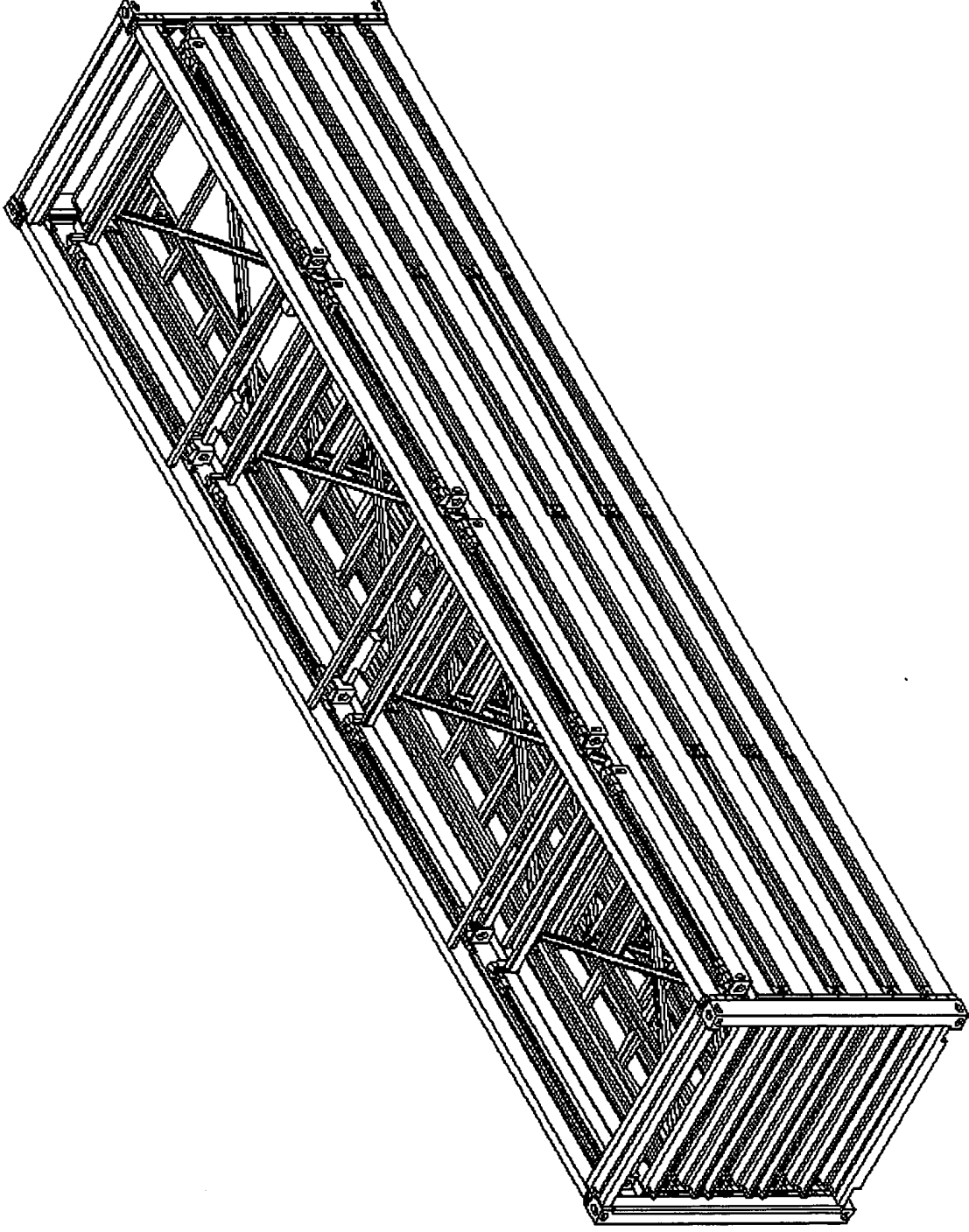


FIG. 47A: Step8 of disassemble and load process: The ceiling frame of the shipping collapsible cargo container is assembled.

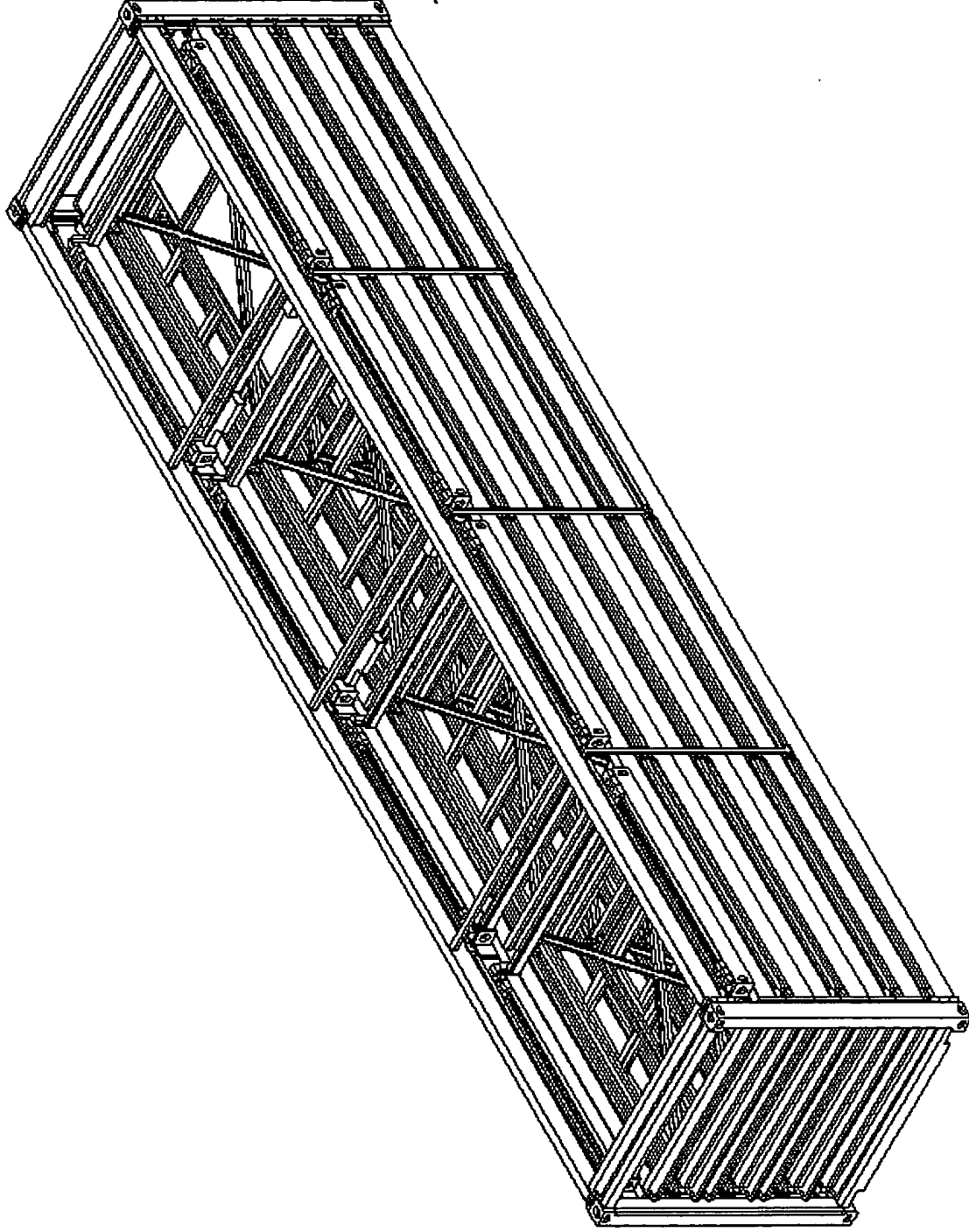


FIG. 48A: Step9 of disassemble and load process: The six vertical beams are assembled.

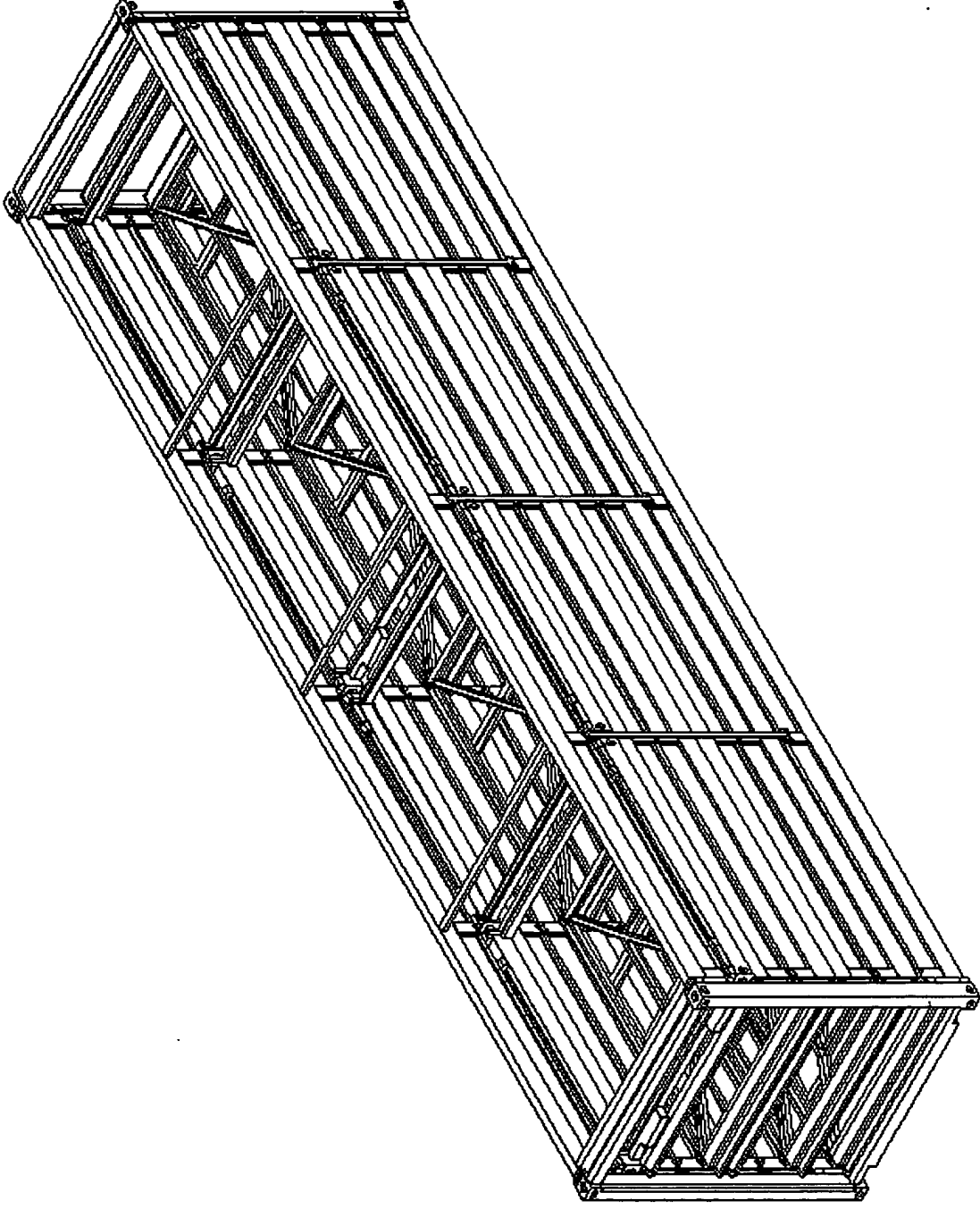


FIG. 1B: Basic isometric view of the 40 foot high cube collapsible cargo container frame loaded with two collapsed 40 foot high cube collapsible cargo container frame panels, it is referred as “shipping collapsible cargo container”

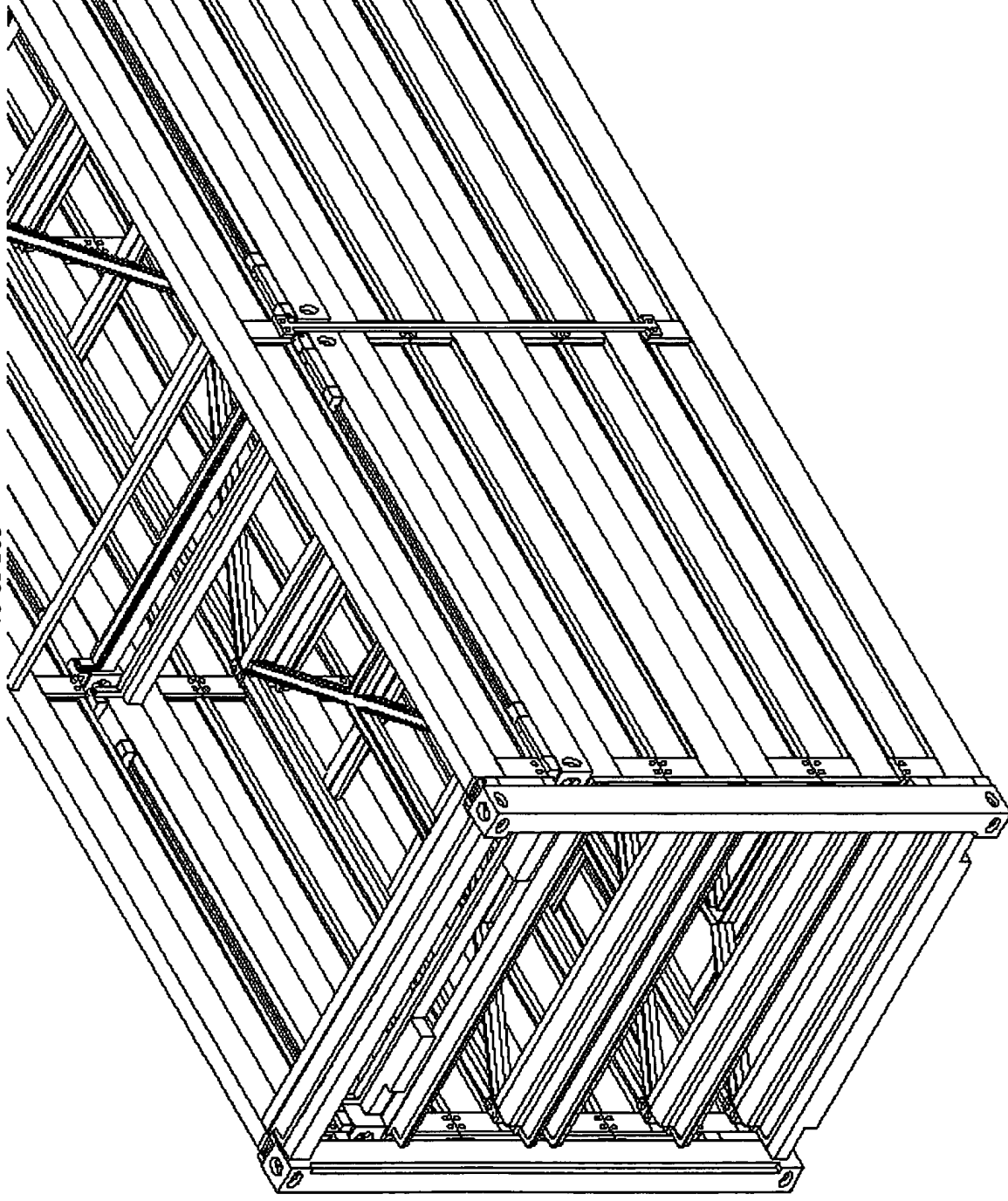


FIG. 2B: Detailed isometric view of the 40 foot high cube collapsible cargo container frame loaded with two collapsed 40 foot high cube collapsible cargo container panels

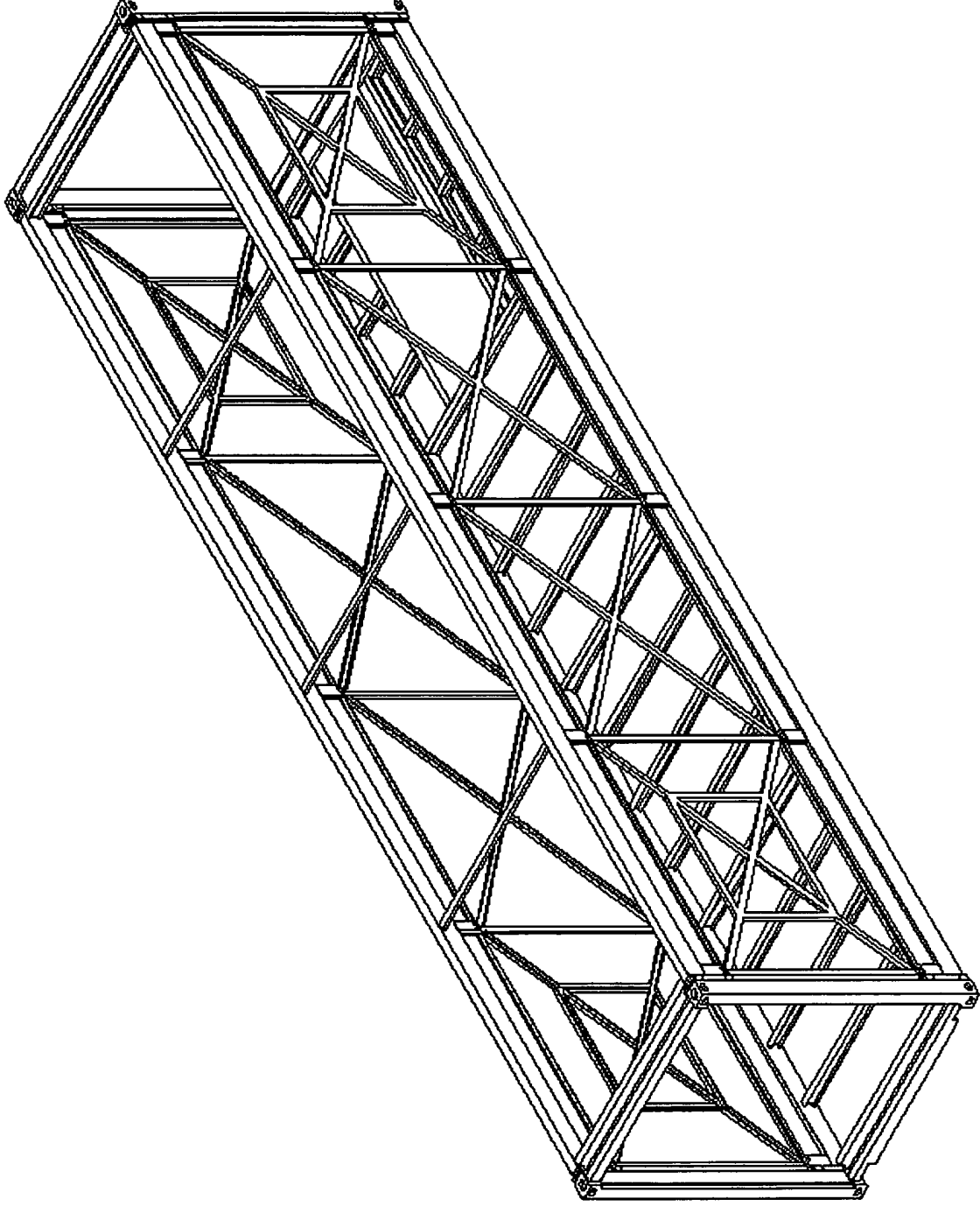


FIG. 3B: Basic isometric view of the 40 foot high cube collapsible cargo container frame

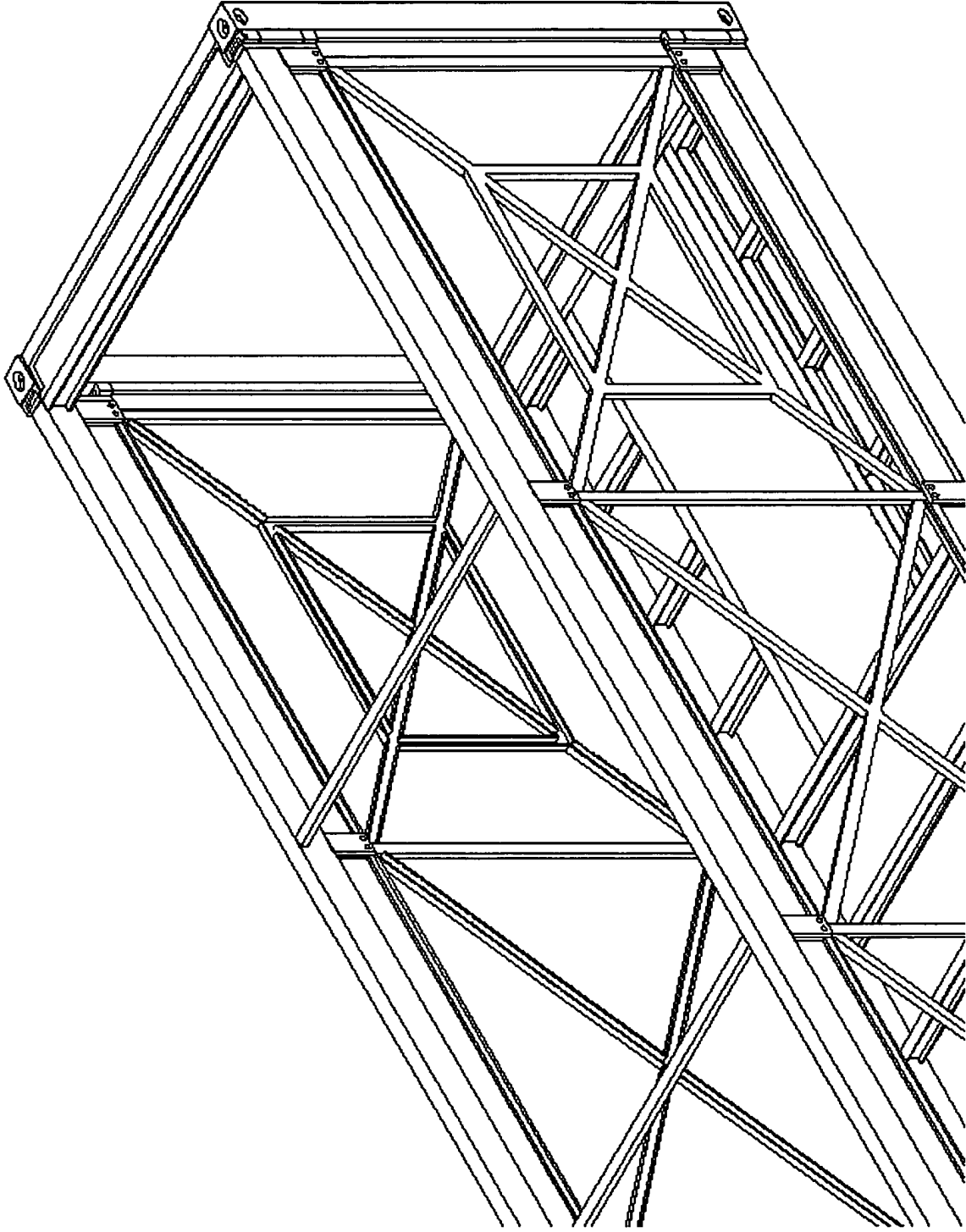


FIG. 4B: Enlarged isometric view of the left end of a 40 foot high cube collapsible cargo container frame

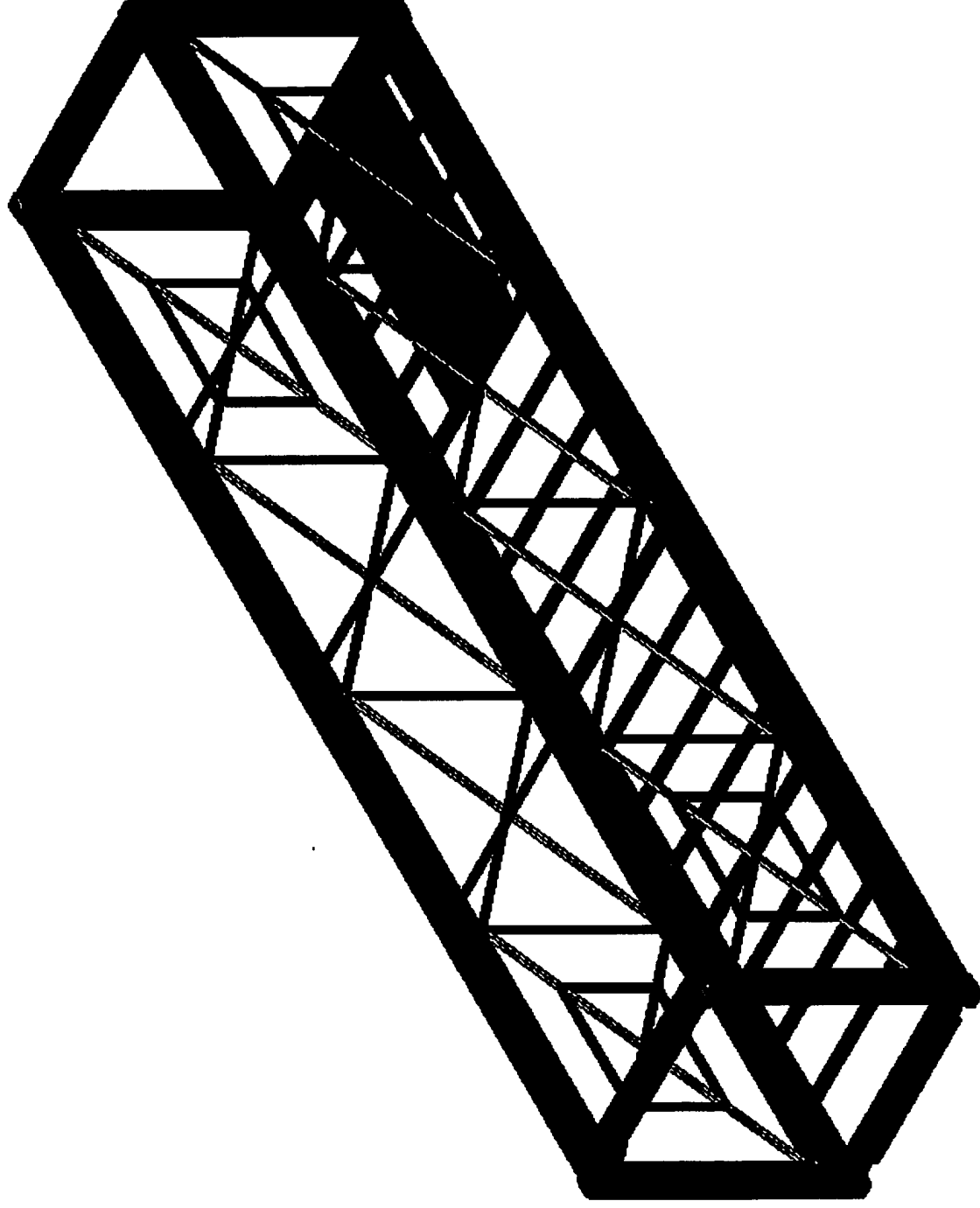


FIG. 5B: Opaque isometric view of the 40 foot high cube collapsible cargo container frame



FIG. 6B: Basic isometric view of the floor frame (40 foot high cube collapsible cargo container)

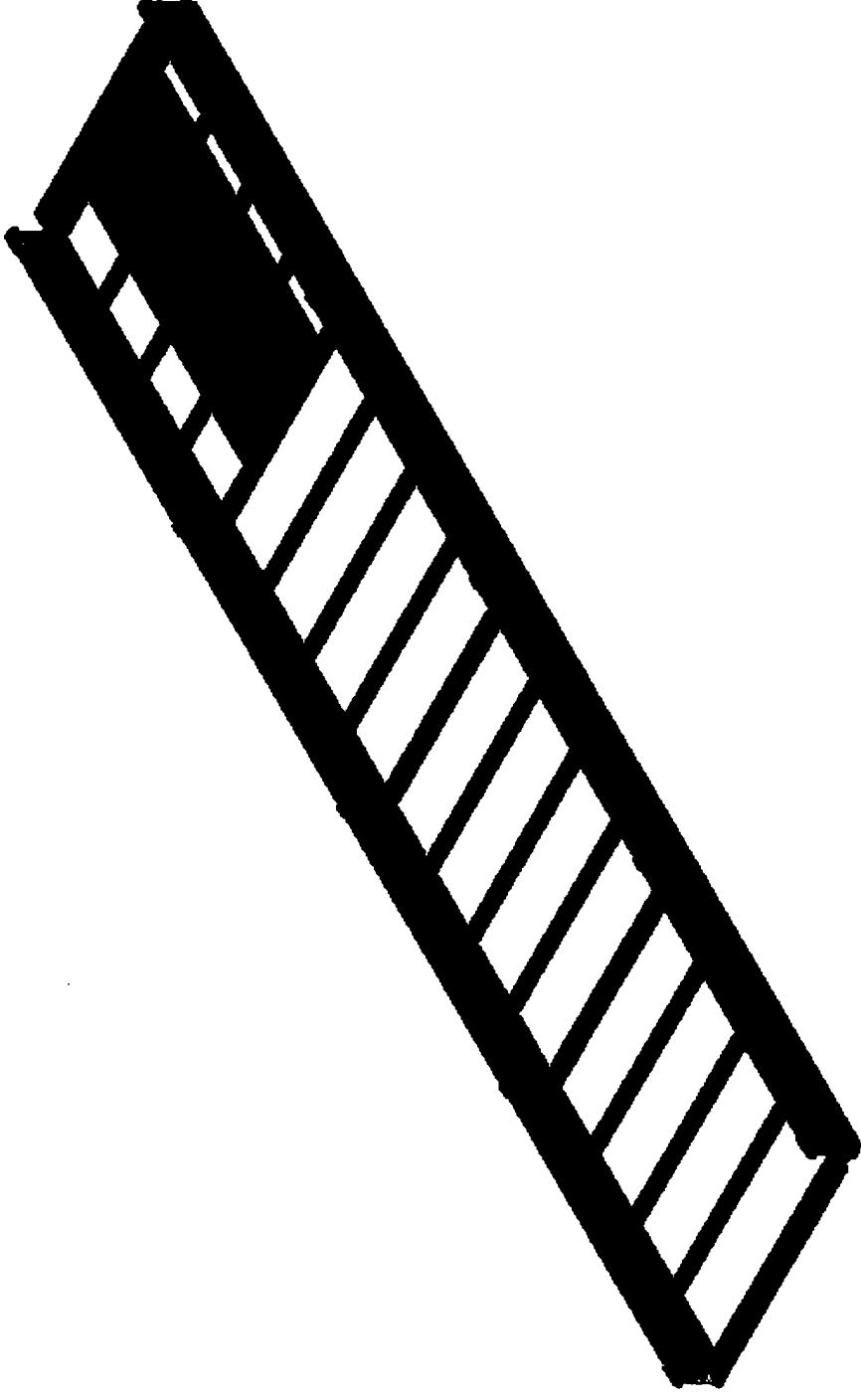


FIG. 7B: Opaque isometric view of the floor frame (40 foot high cube collapsible cargo container)

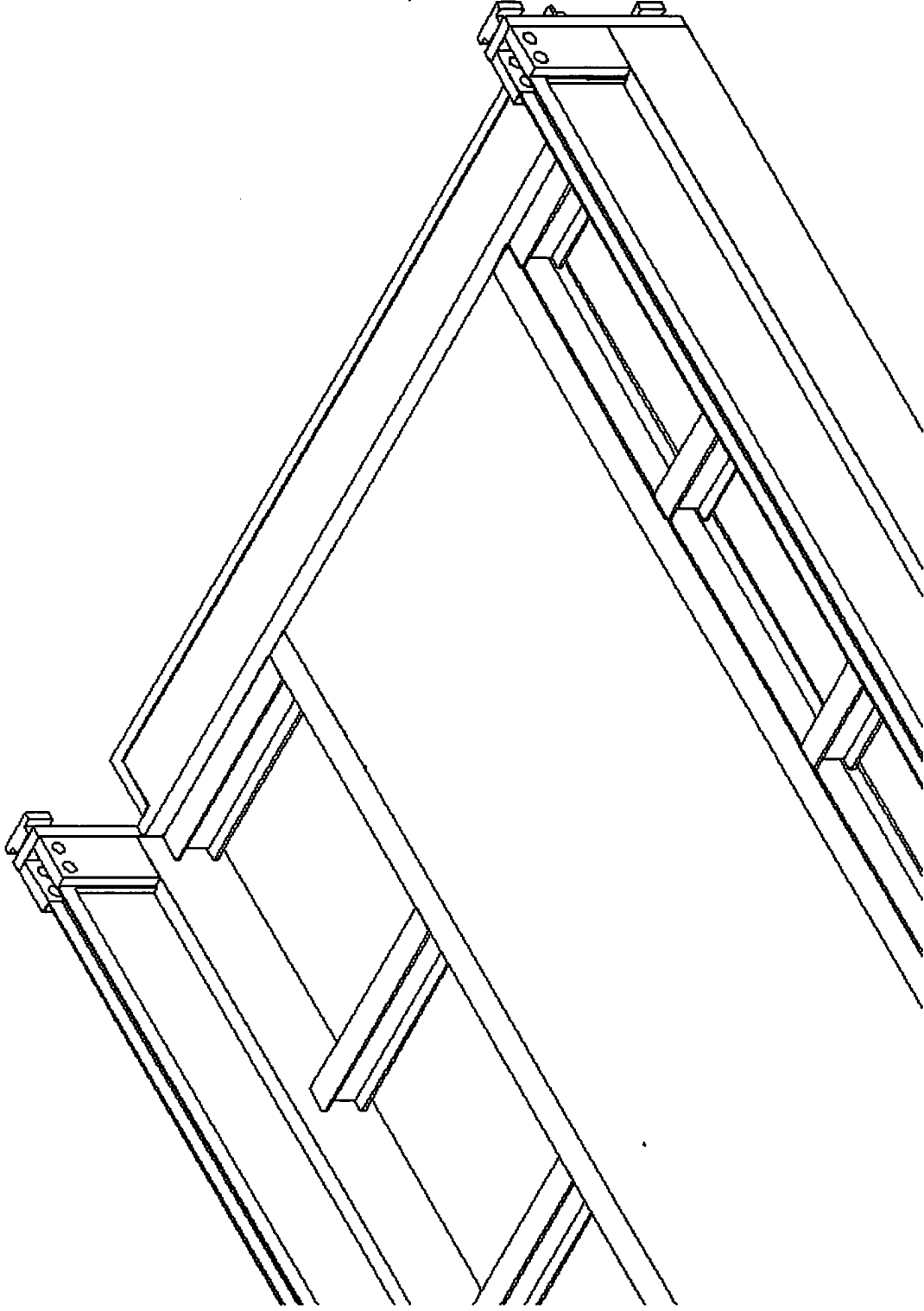


FIG. 8B: Isometric view of the left end of the floor frame (40 foot high cube collapsible cargo container)

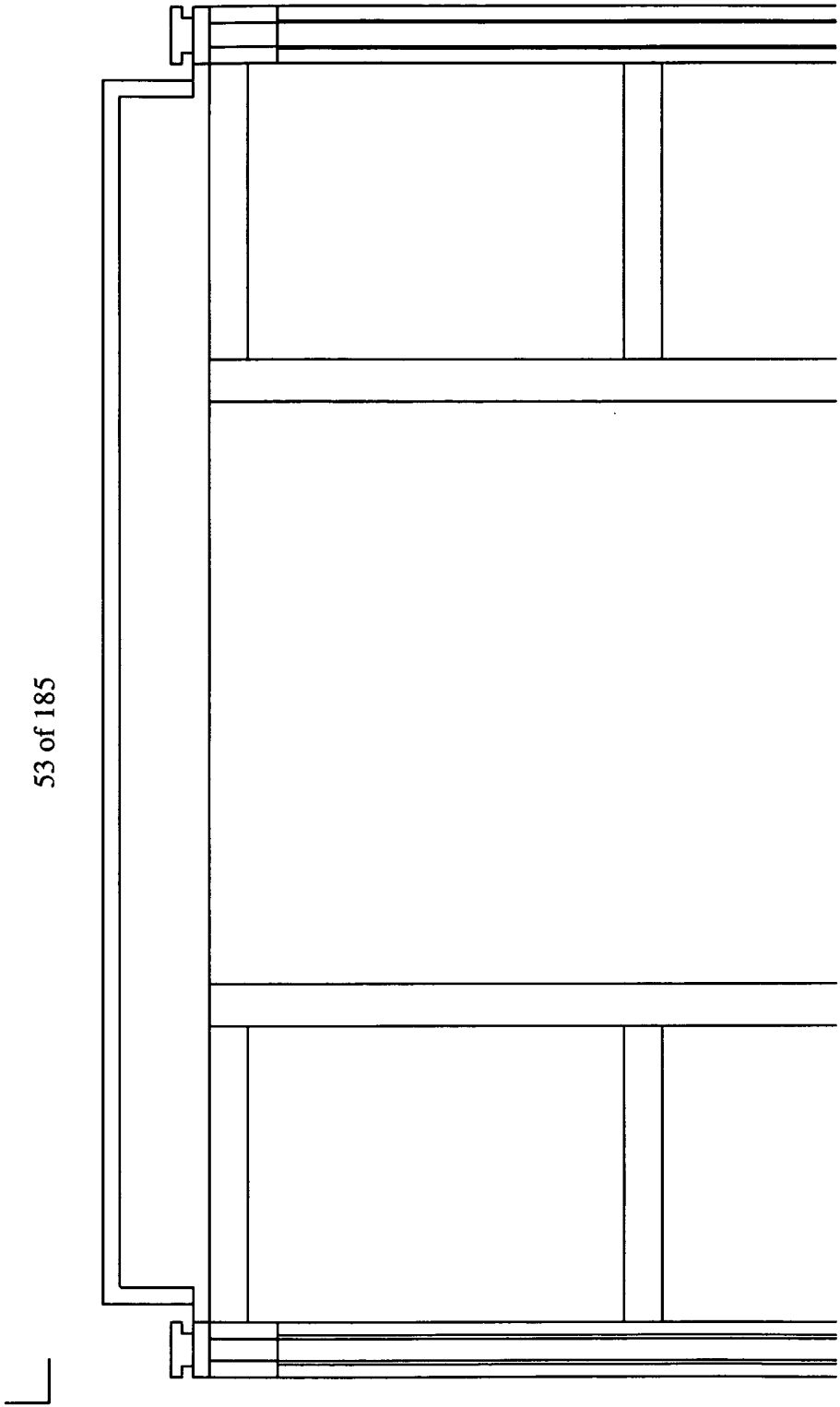


FIG. 9B: Top view of the left end of a floor frame (40 foot high cube collapsible cargo container)

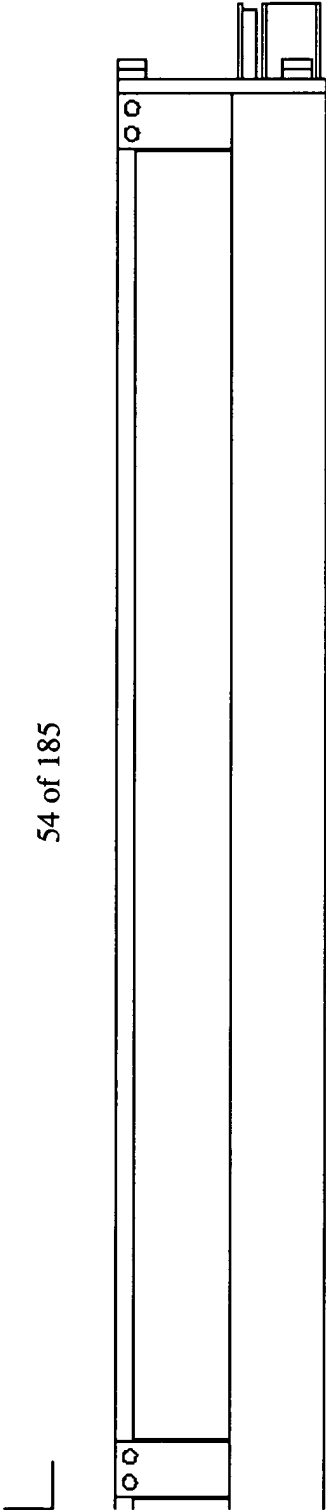


FIG. 10B: Front view of the left end of a floor frame (40 foot high cube collapsible cargo container)

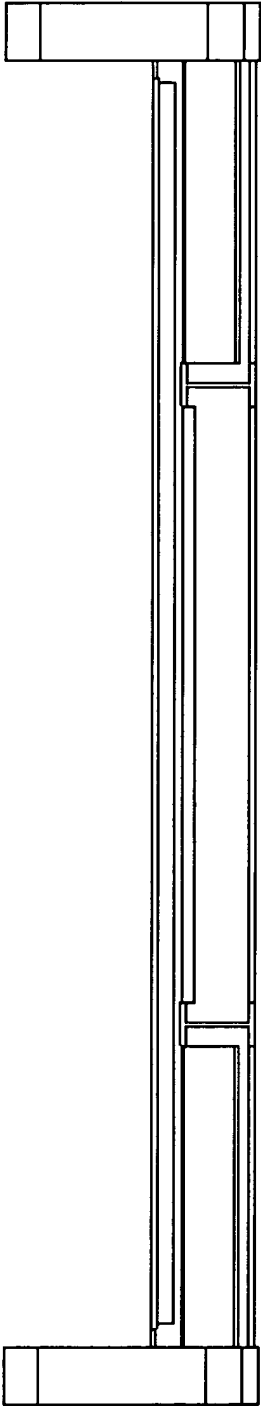


FIG. 11B: Left view of a floor frame (40 foot high cube collapsible cargo container)

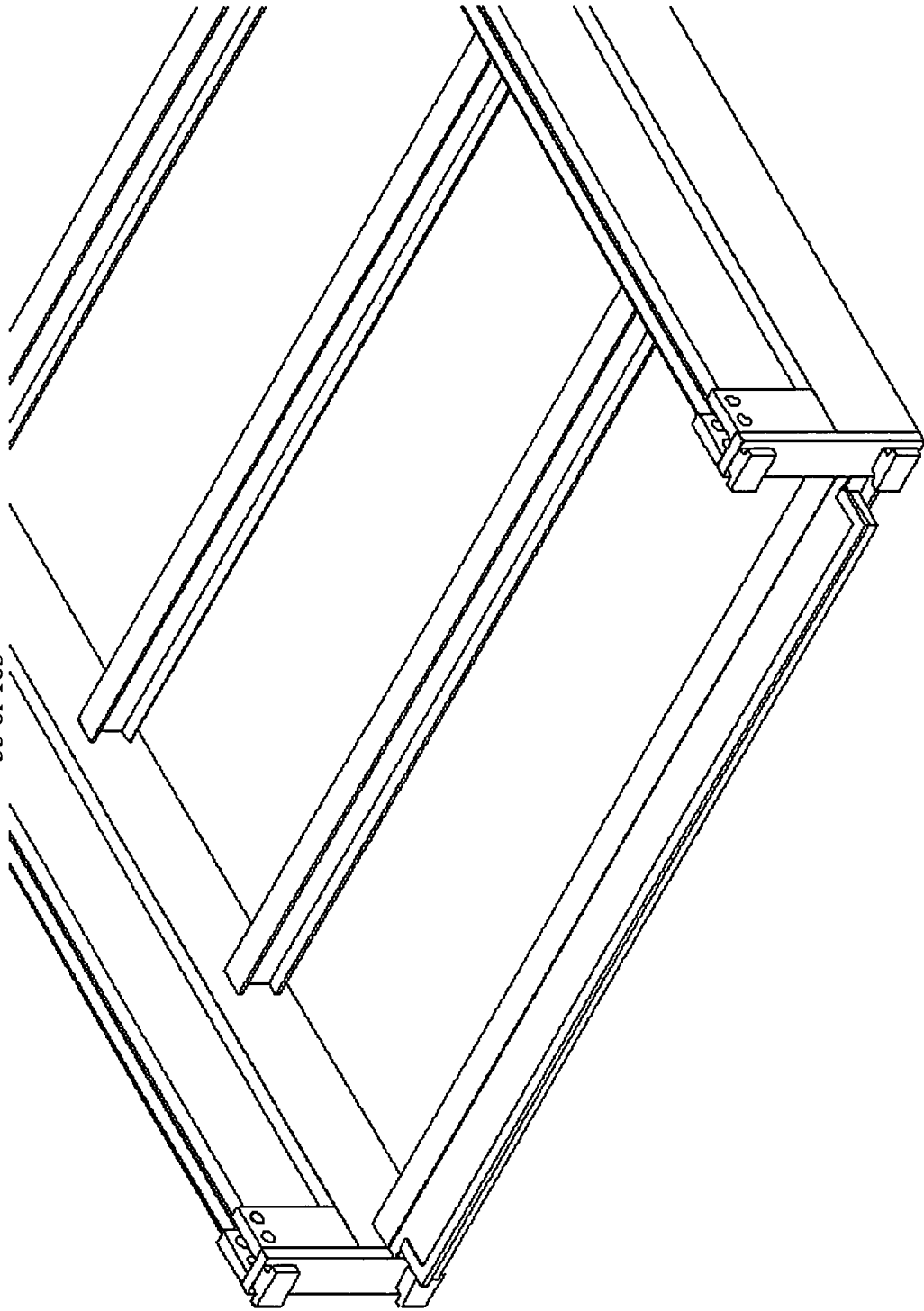


FIG. 12B: Isometric view of the right end of a floor frame (40 foot high cube collapsible cargo container)

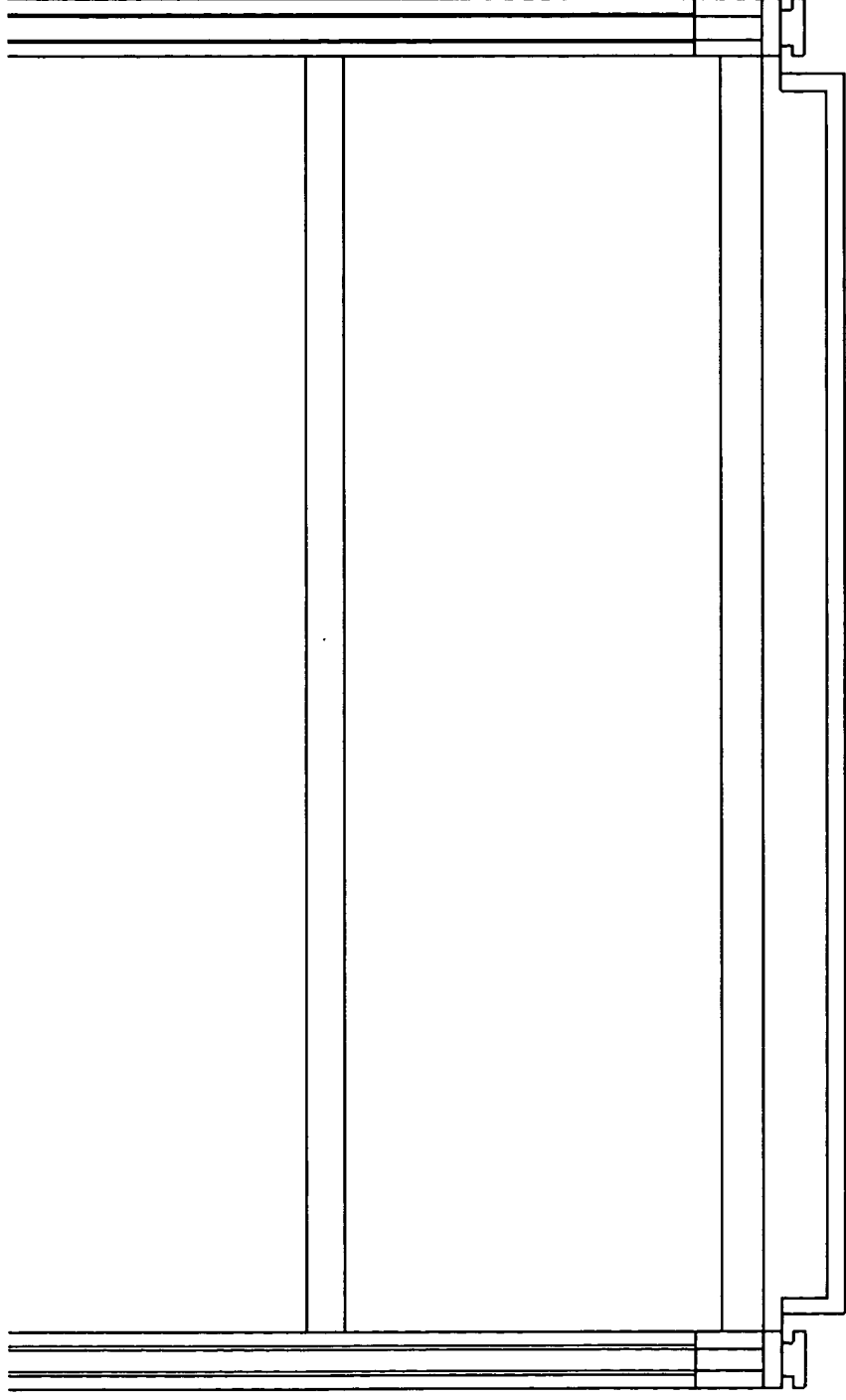


FIG. 13B: Top view of the right end of a floor frame (40 foot high cube collapsible cargo container)



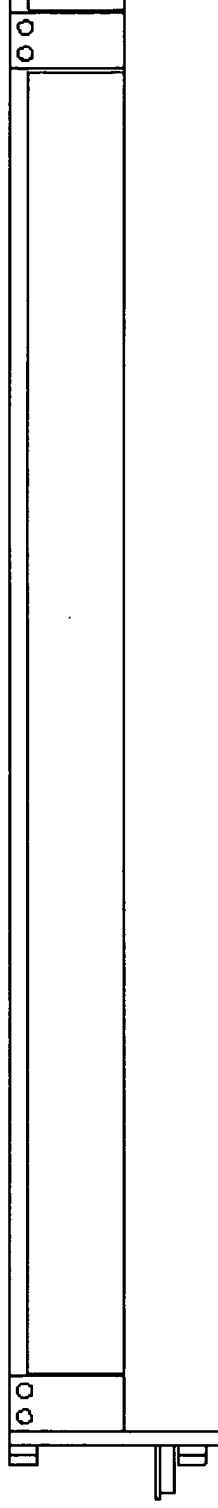


FIG. 14B: Front view of the right end of a floor frame (40 foot high cube collapsible cargo container)



FIG. 15B: Right view of a floor frame (40 foot high cube collapsible cargo container)

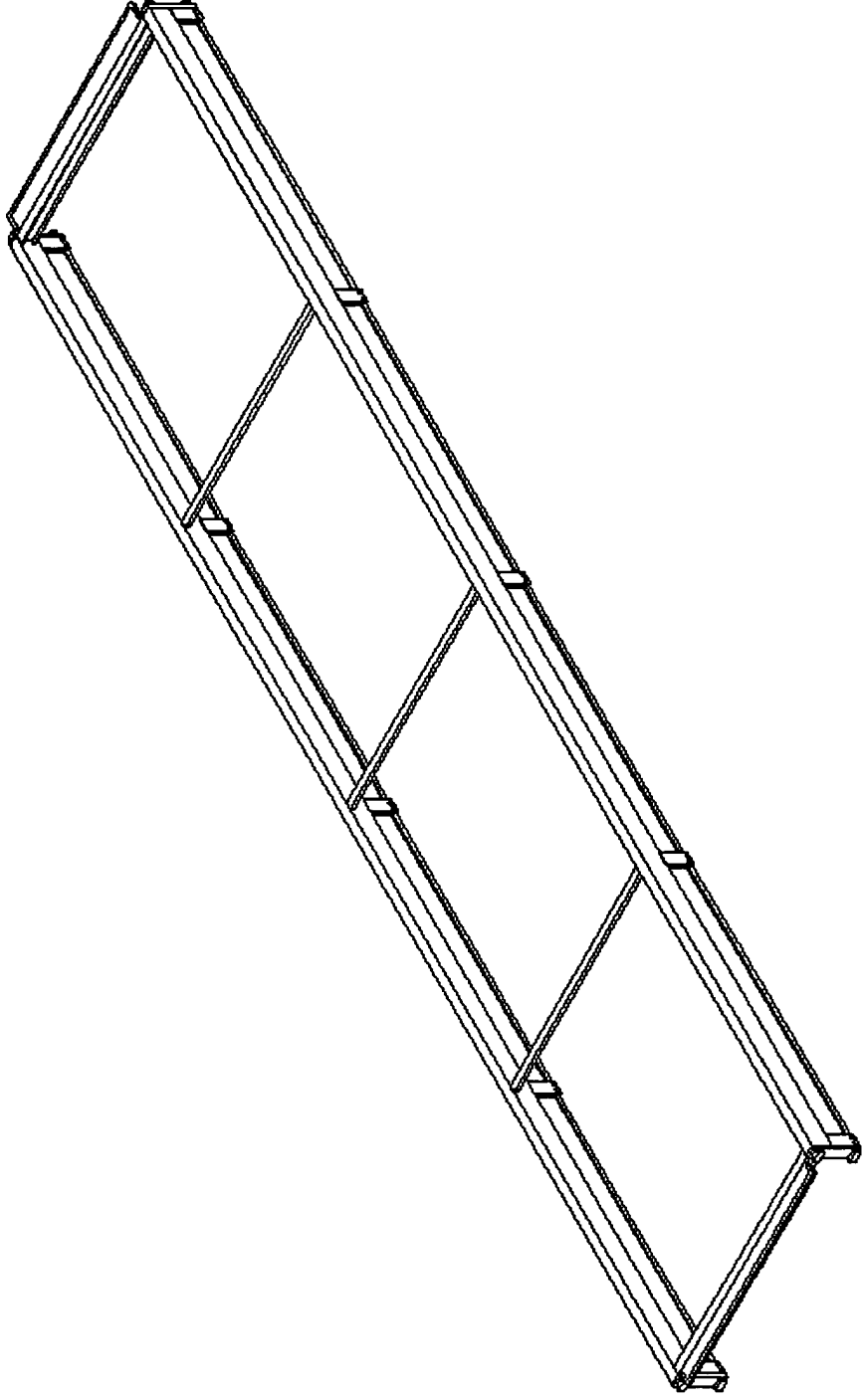


FIG. 16B: Isometric view of a ceiling frame (40 foot high cube collapsible cargo container)

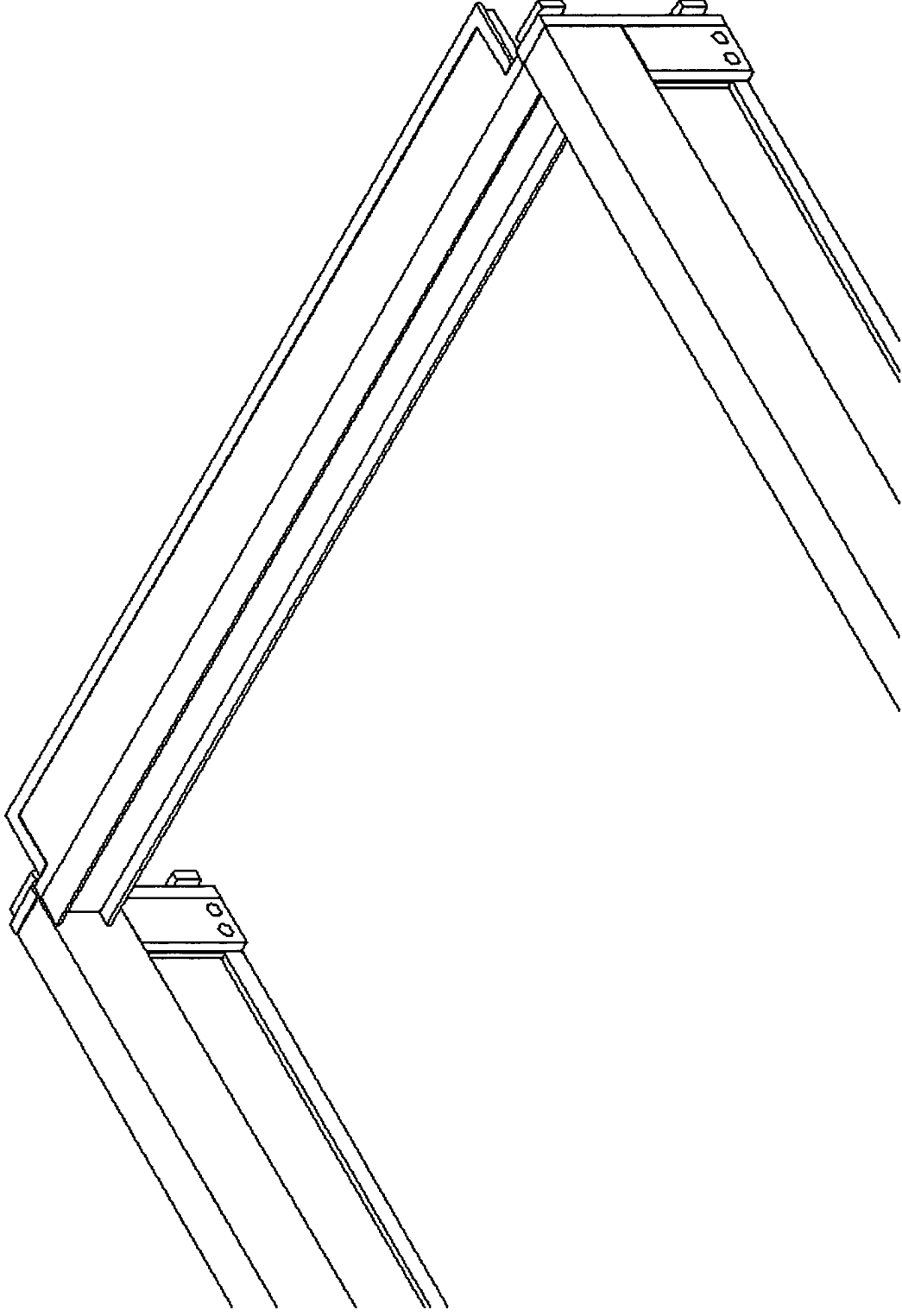


FIG. 17B: Isometric view of the left end of a ceiling frame (40 foot high cube collapsible cargo container)

COLLAPSIBLE CARGO CONTAINER
Dennis Zhu Ouyang 847-781-5319

60 of 185

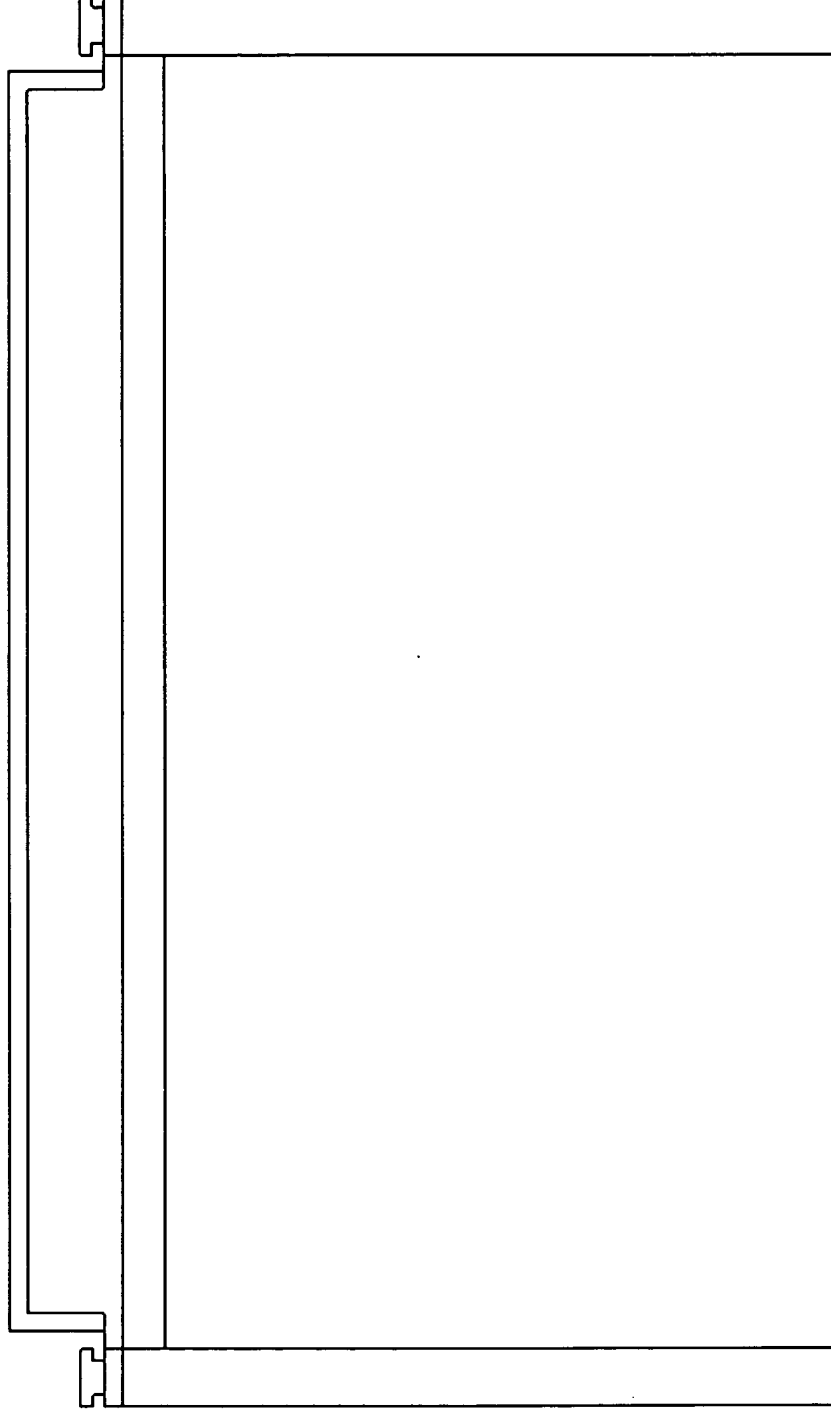


FIG. 18B: Top view of the left end of a ceiling frame (40 foot high cube collapsible cargo container)

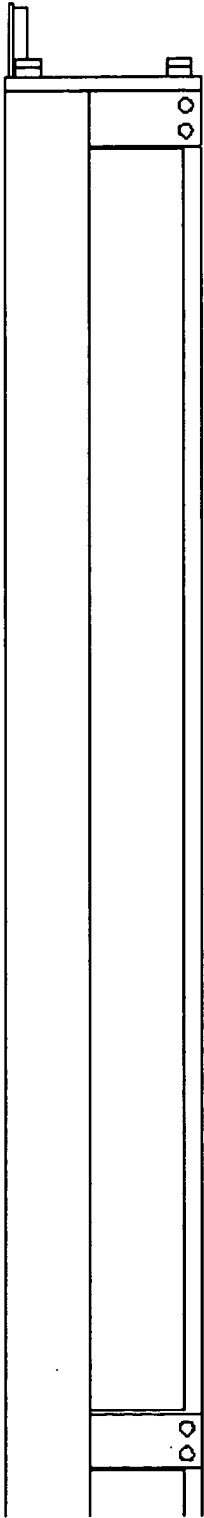


FIG. 19B: the ceiling frame front view on its left (40 foot high cube collapsible cargo container)

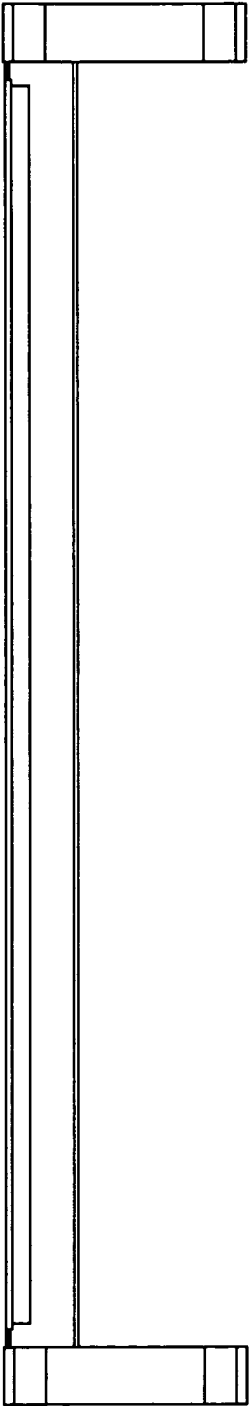


FIG. 20B: Left view of a ceiling frame (40 foot high cube collapsible cargo container)

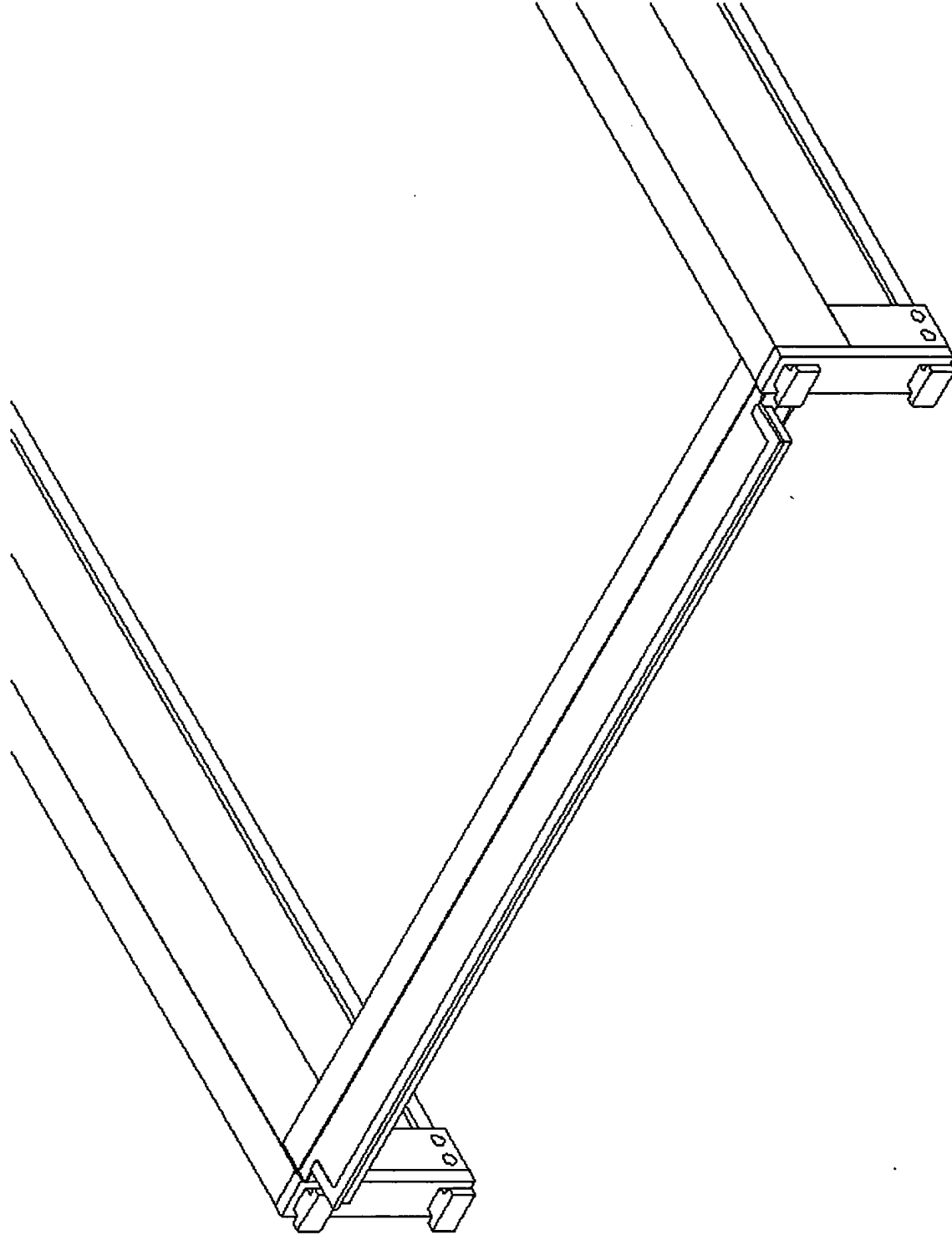


FIG. 21B: Isometric view of the right end of a ceiling frame (40 foot high cube collapsible cargo container)

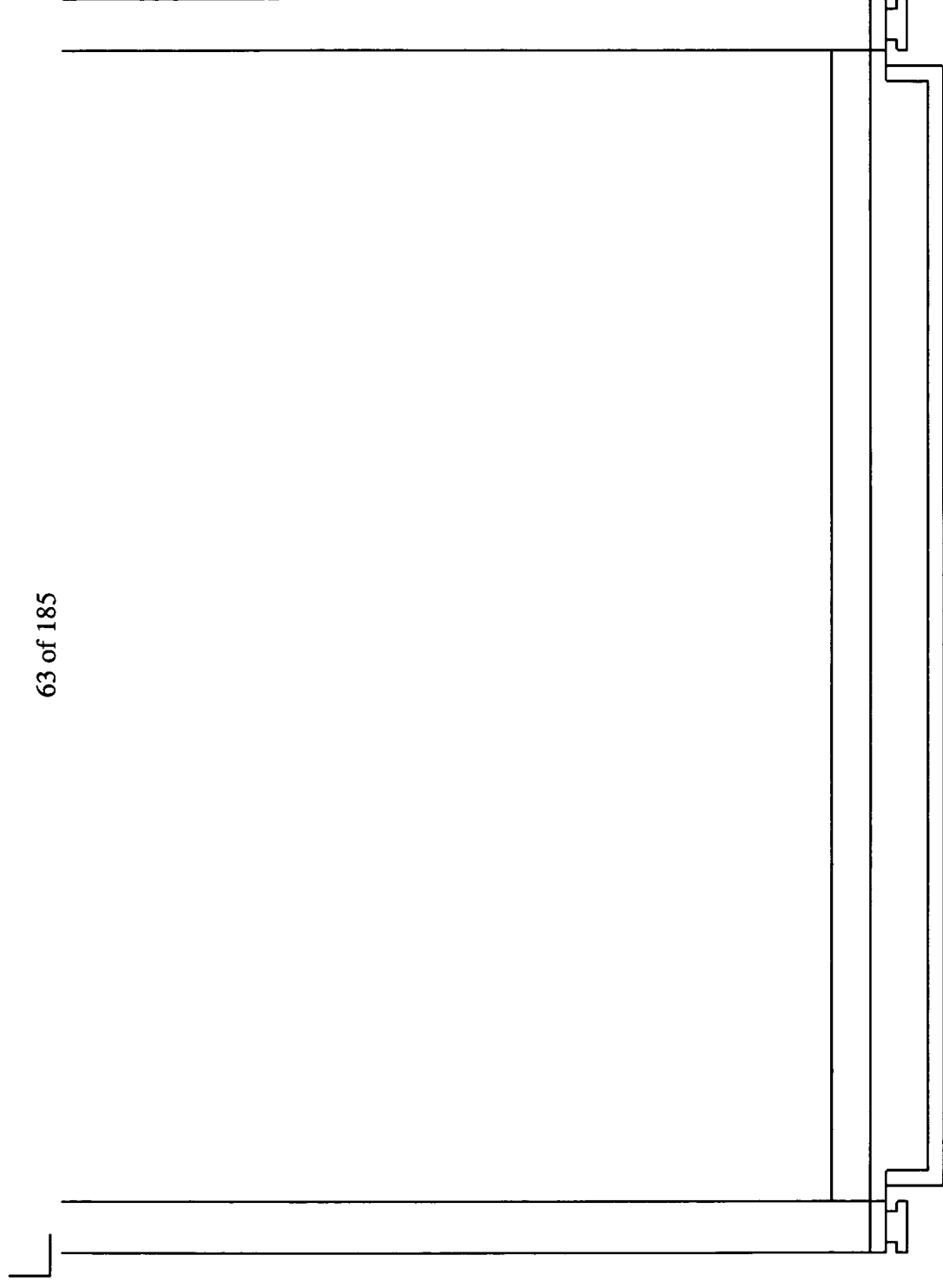


FIG. 22B: Top view of the right end of a ceiling frame (40 foot high cube collapsible cargo container)



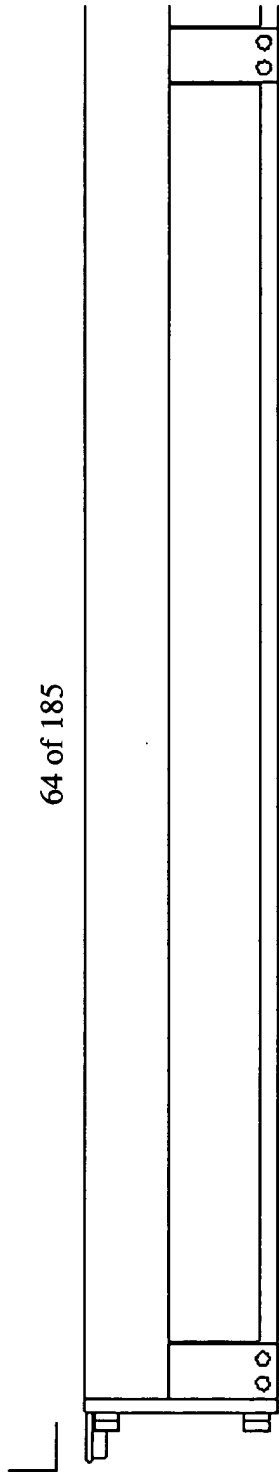


FIG. 23B: Front view of the right end of a ceiling frame (40 foot high cube collapsible cargo container)

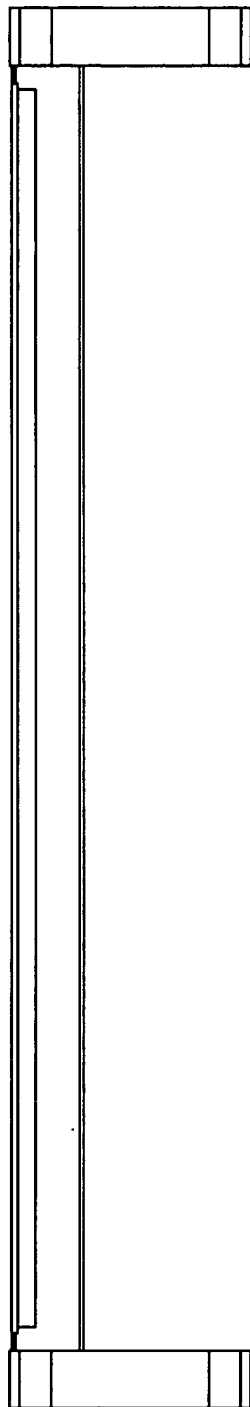


FIG. 24B: Right view of a ceiling frame (40 foot high cube collapsible cargo container)

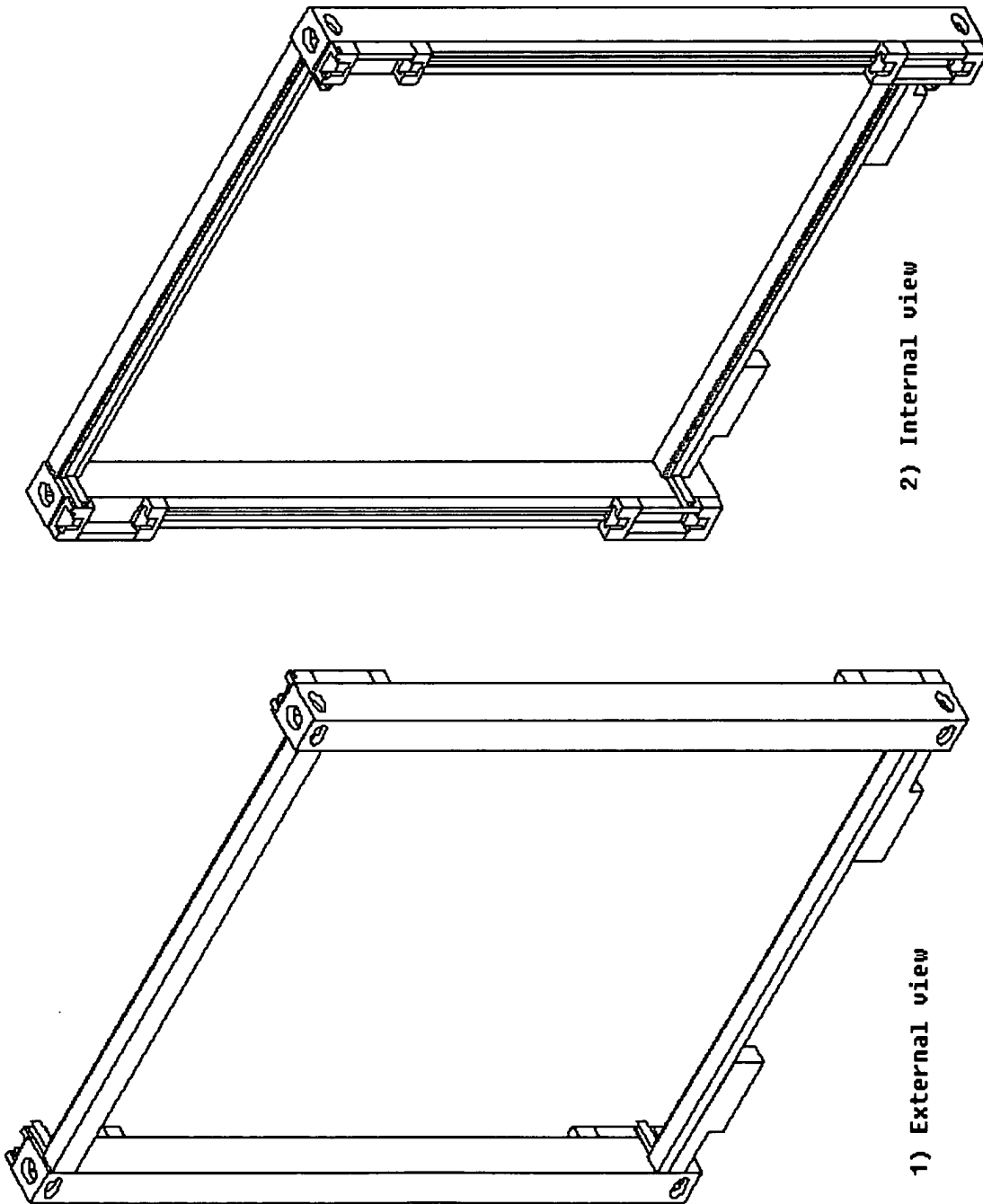


FIG. 25B: Isometric views of a left frame (40 foot high cube collapsible cargo container)

66 of 185

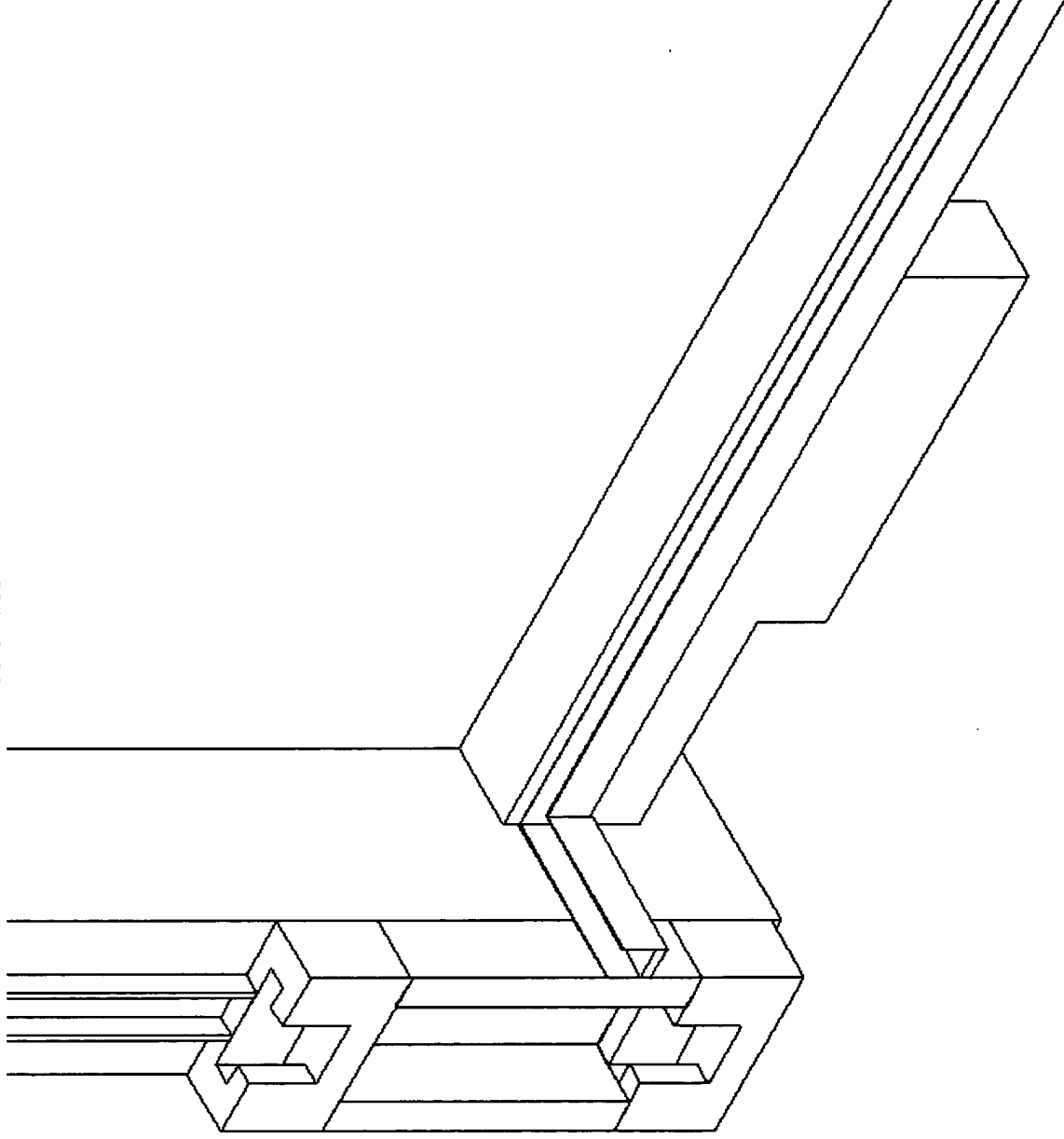


FIG. 26B: Isometric internal view of the corner of a left frame (40 foot high cube collapsible cargo container)

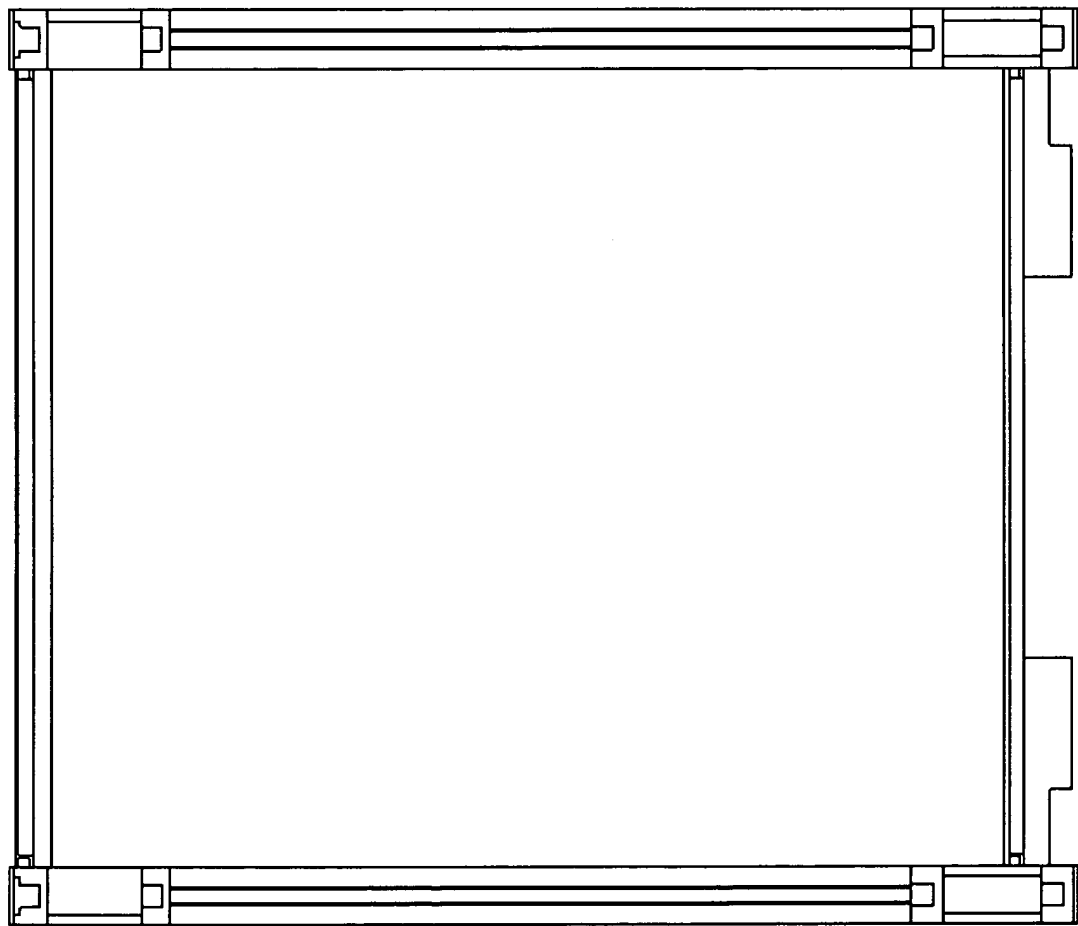


FIG. 27B: Internal view of a left frame (40 foot high cube collapsible cargo container)

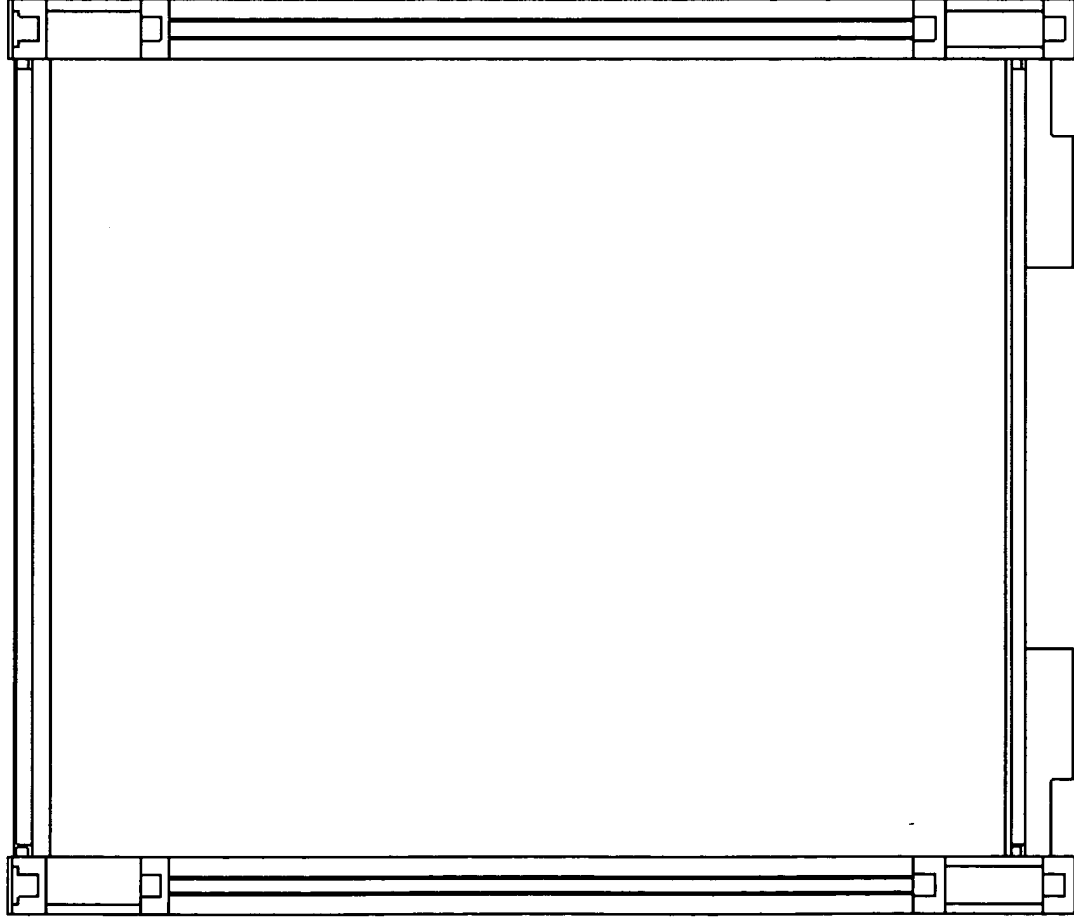


FIG. 28B: External view of a left frame (40 foot high cube collapsible cargo container)

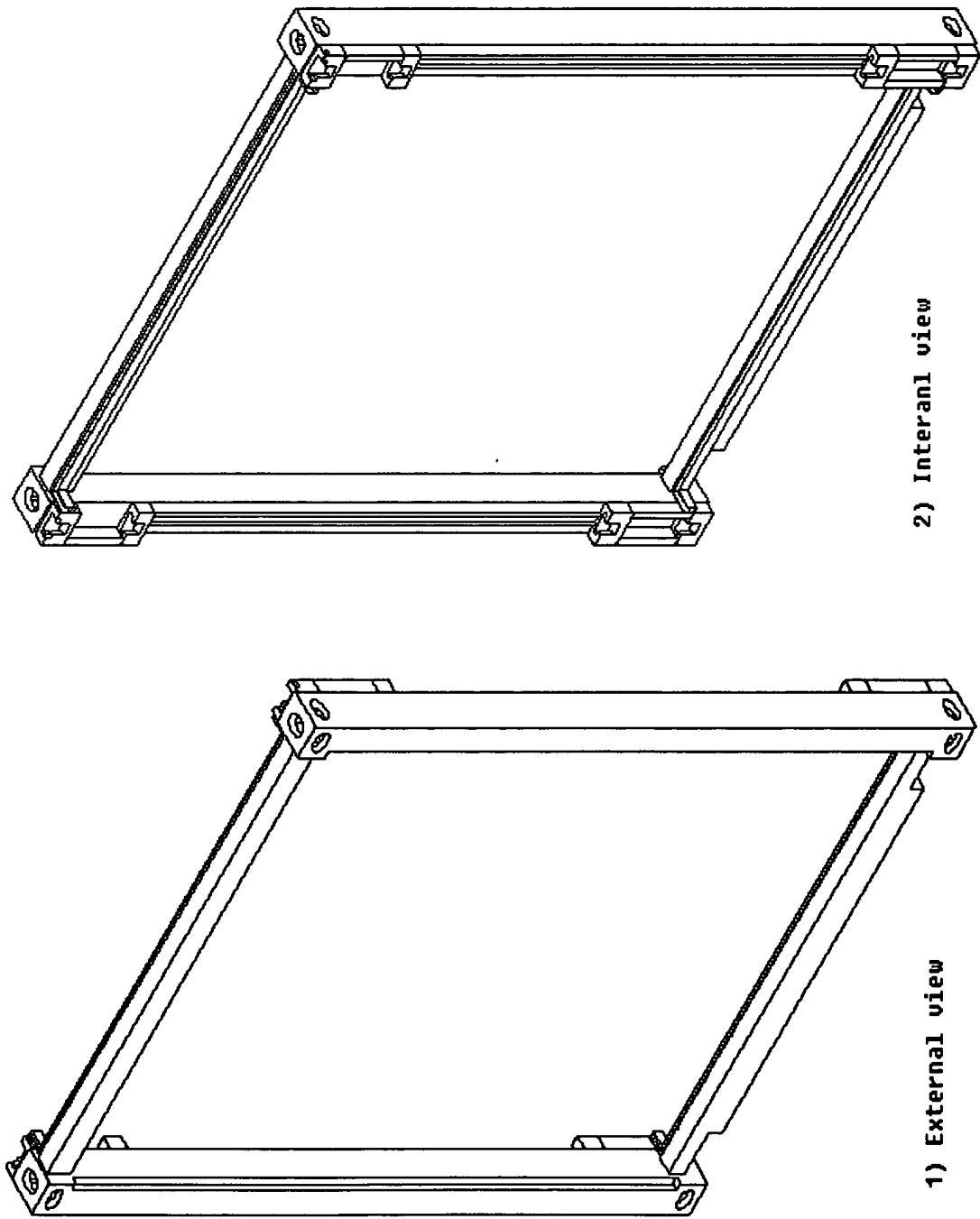


FIG. 29B: Isometric views of a right frame (40 foot high cube collapsible cargo container)

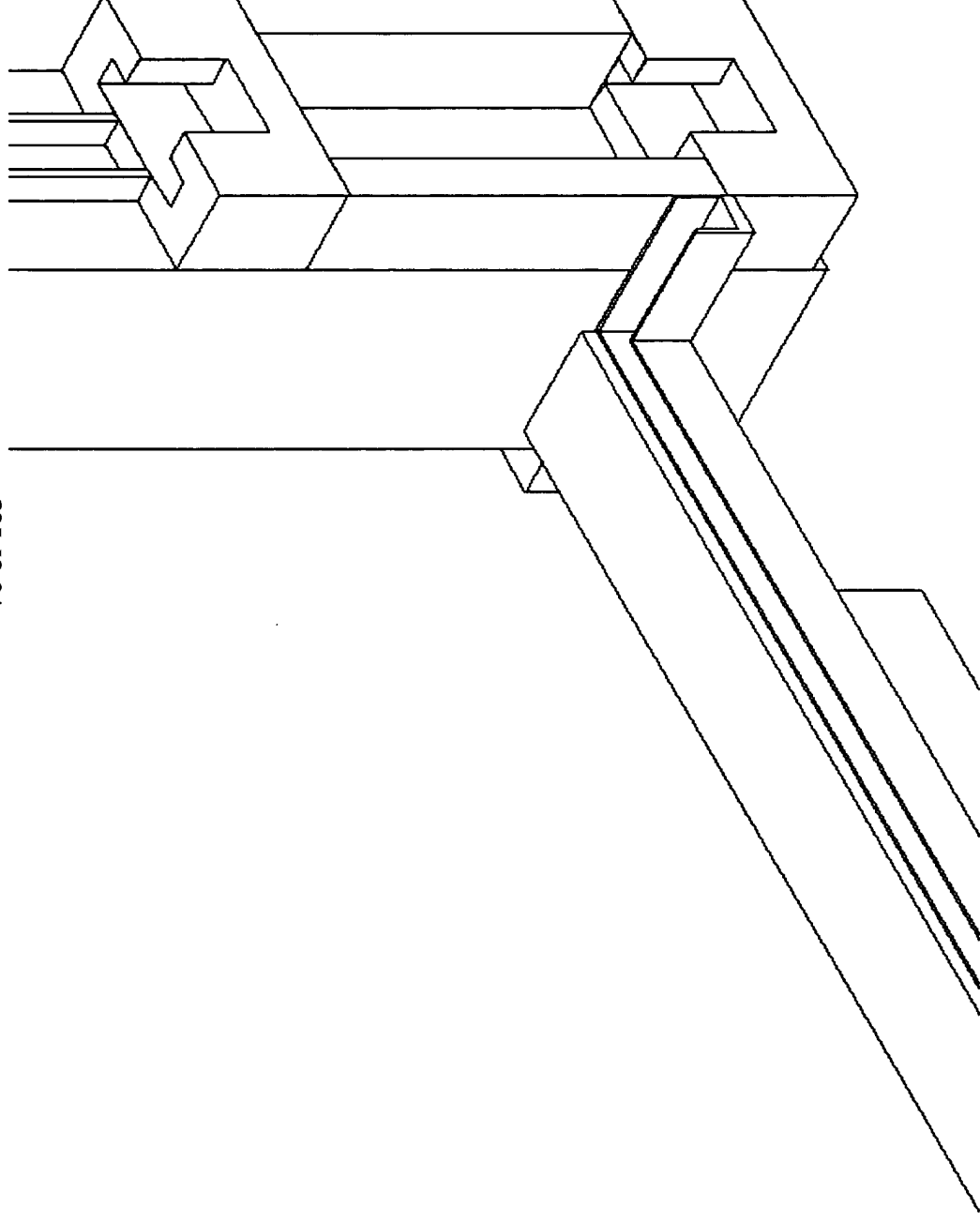


FIG. 30B: Isometric internal view of the corner of a right frame (40 foot high cube collapsible cargo container)

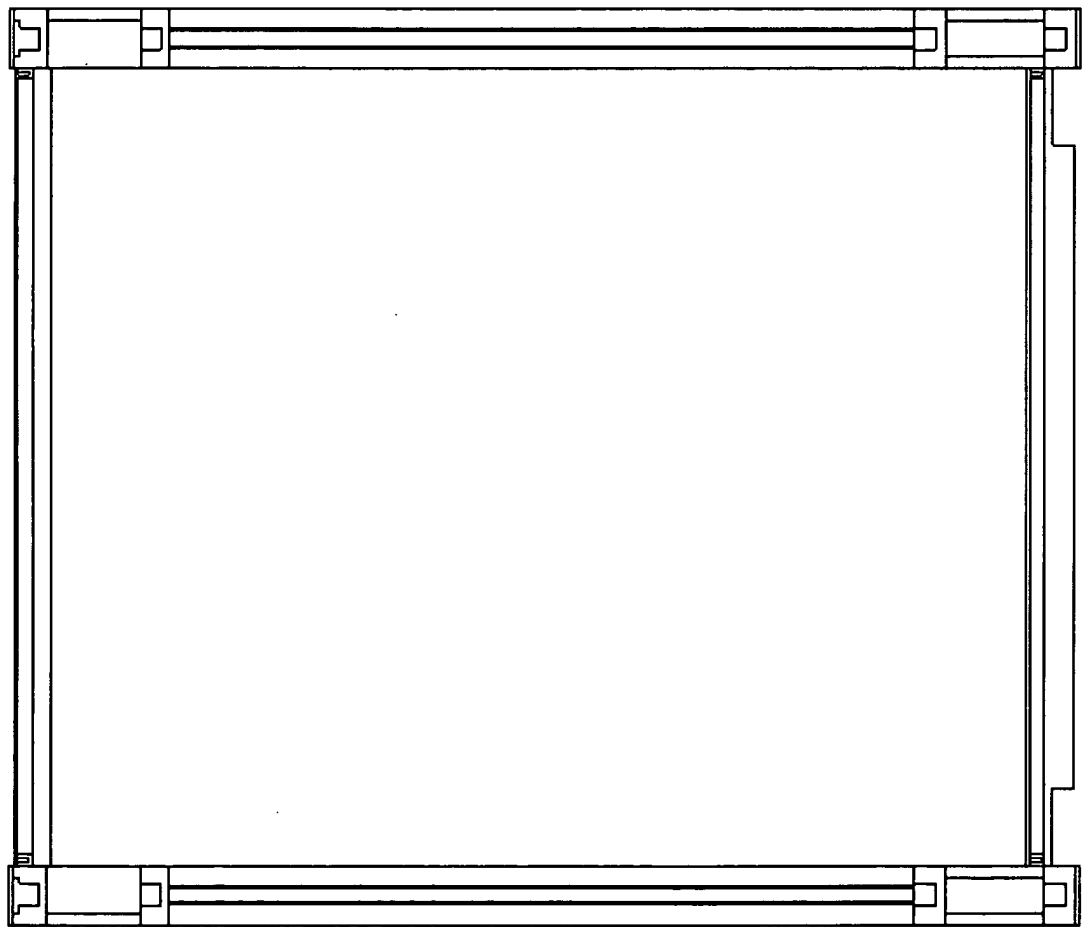


FIG. 31B: Internal view of a right frame (40 foot high cube collapsible cargo container)

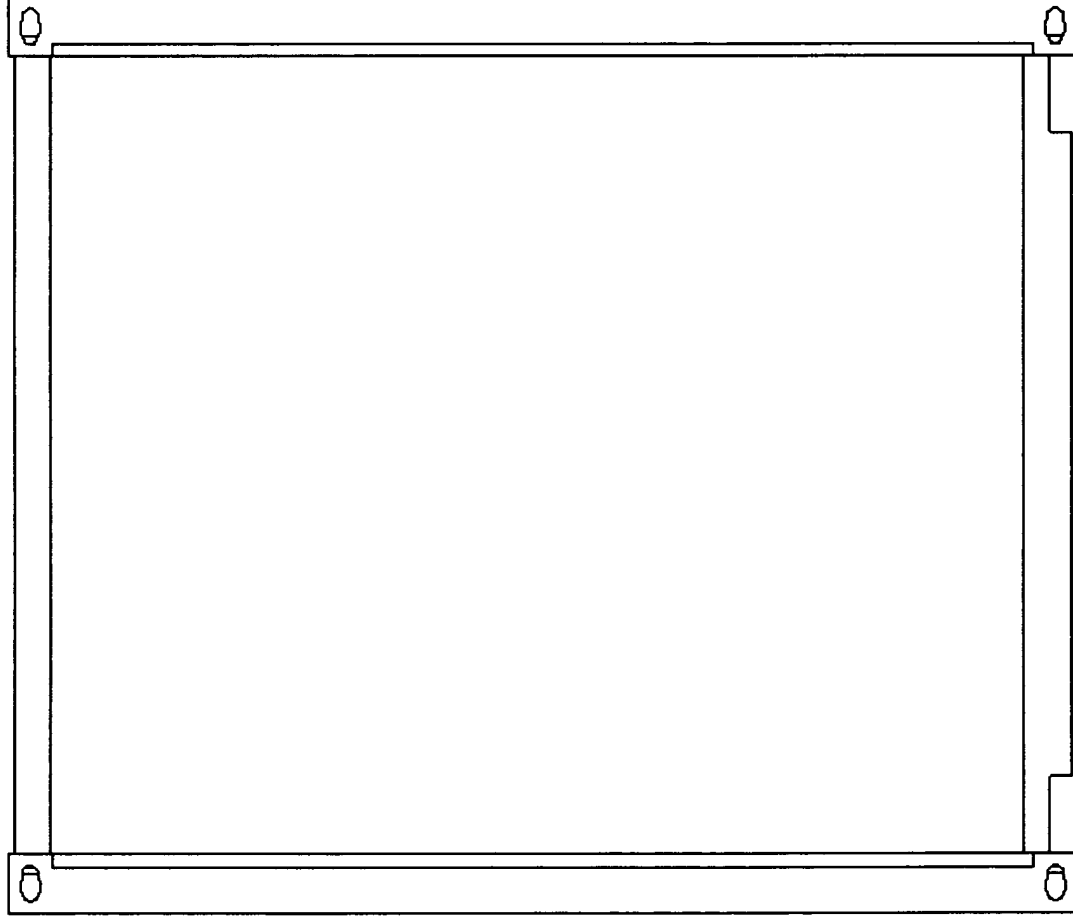


FIG. 32B: External view of a right frame (40 foot high cube collapsible cargo container)

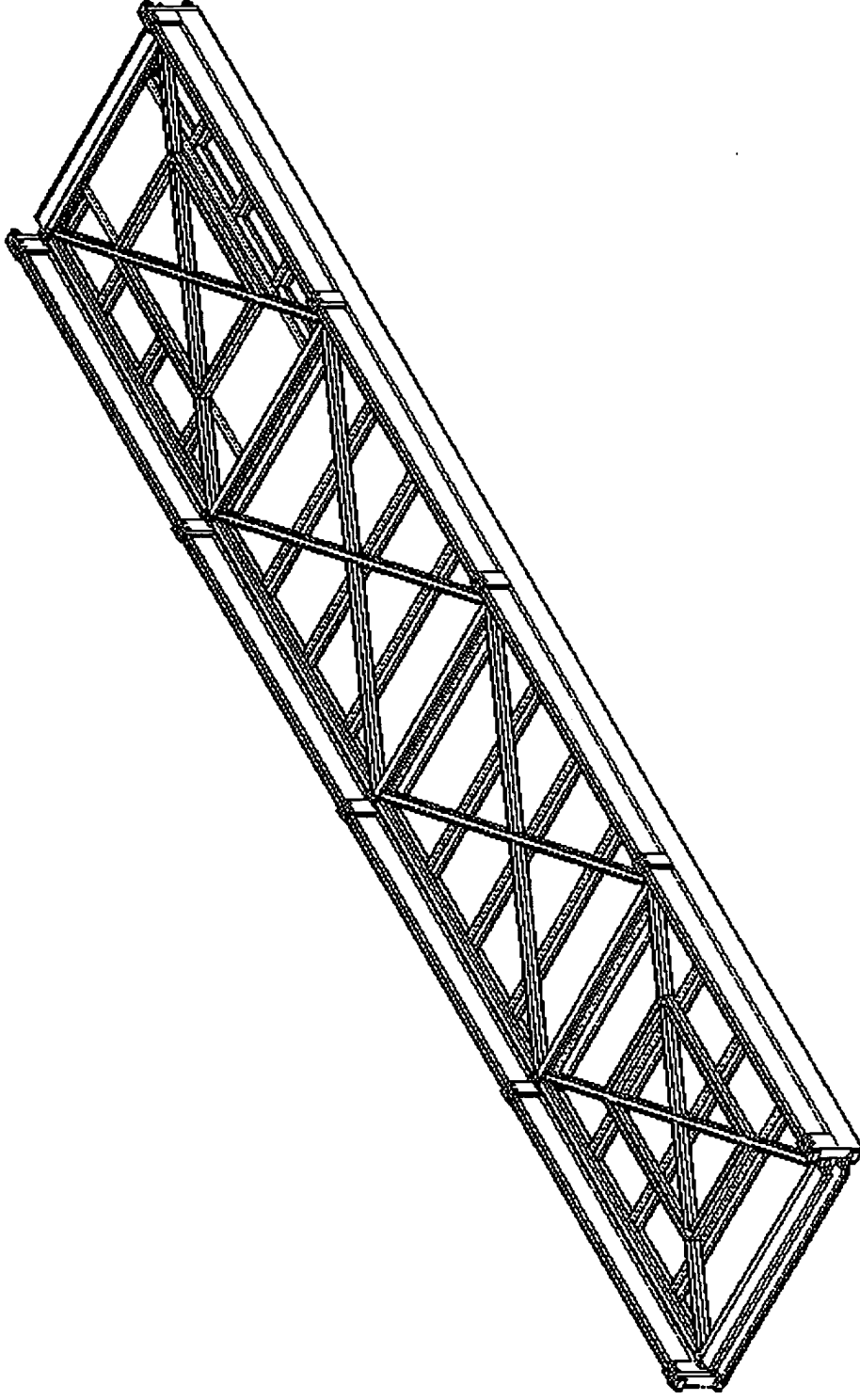


FIG. 35B: Isometric view of a floor frame that contains a front frame and a back frame (40 foot high cube collapsible cargo container)

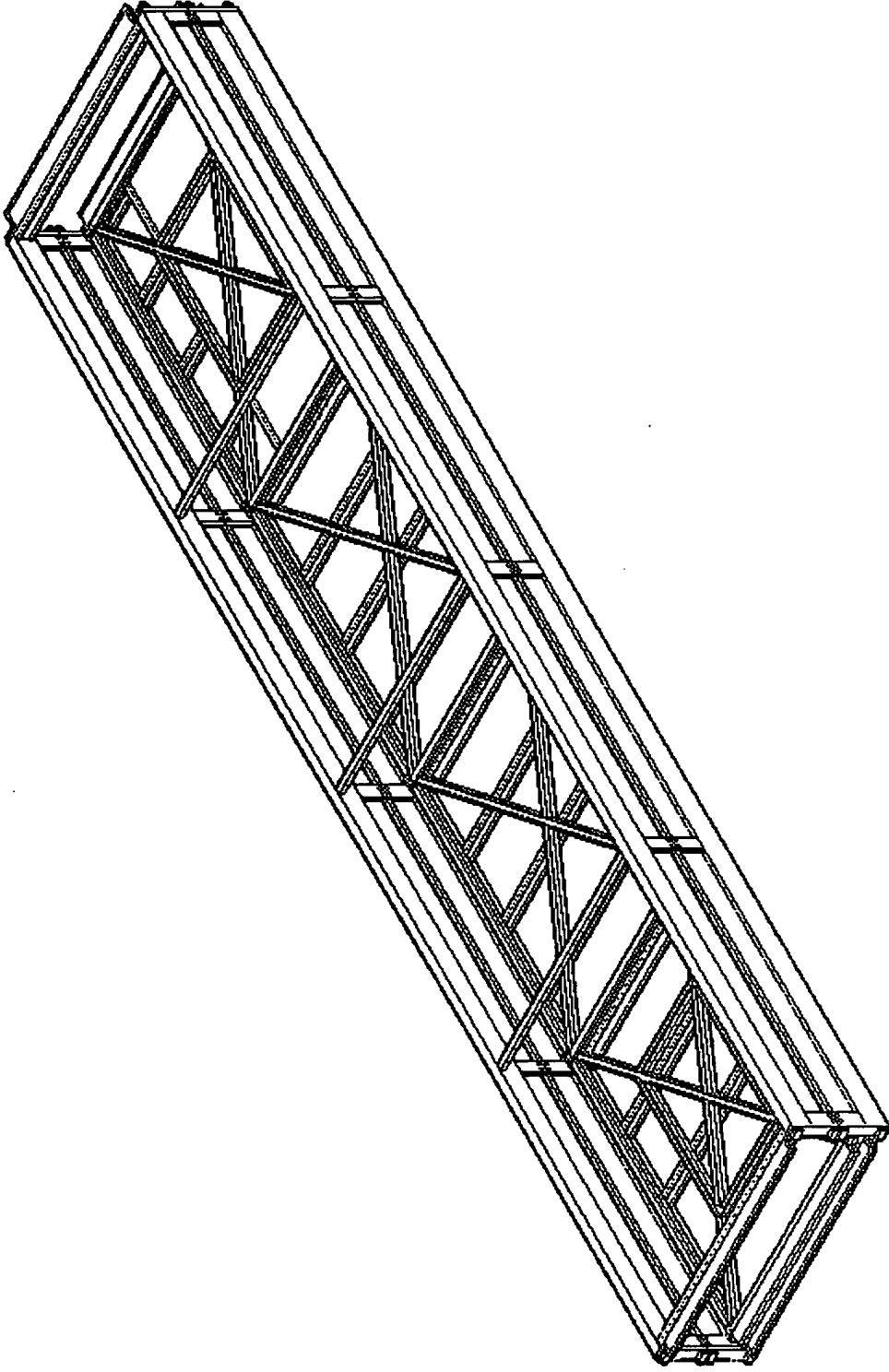


FIG. 36B: Isometric view of a ceiling frame stacked on top of a floor frame that contains a front frame and a back frame (40 foot high cube collapsible cargo container). This assembly is now referred as "collapsible cargo container frame panel assembly".

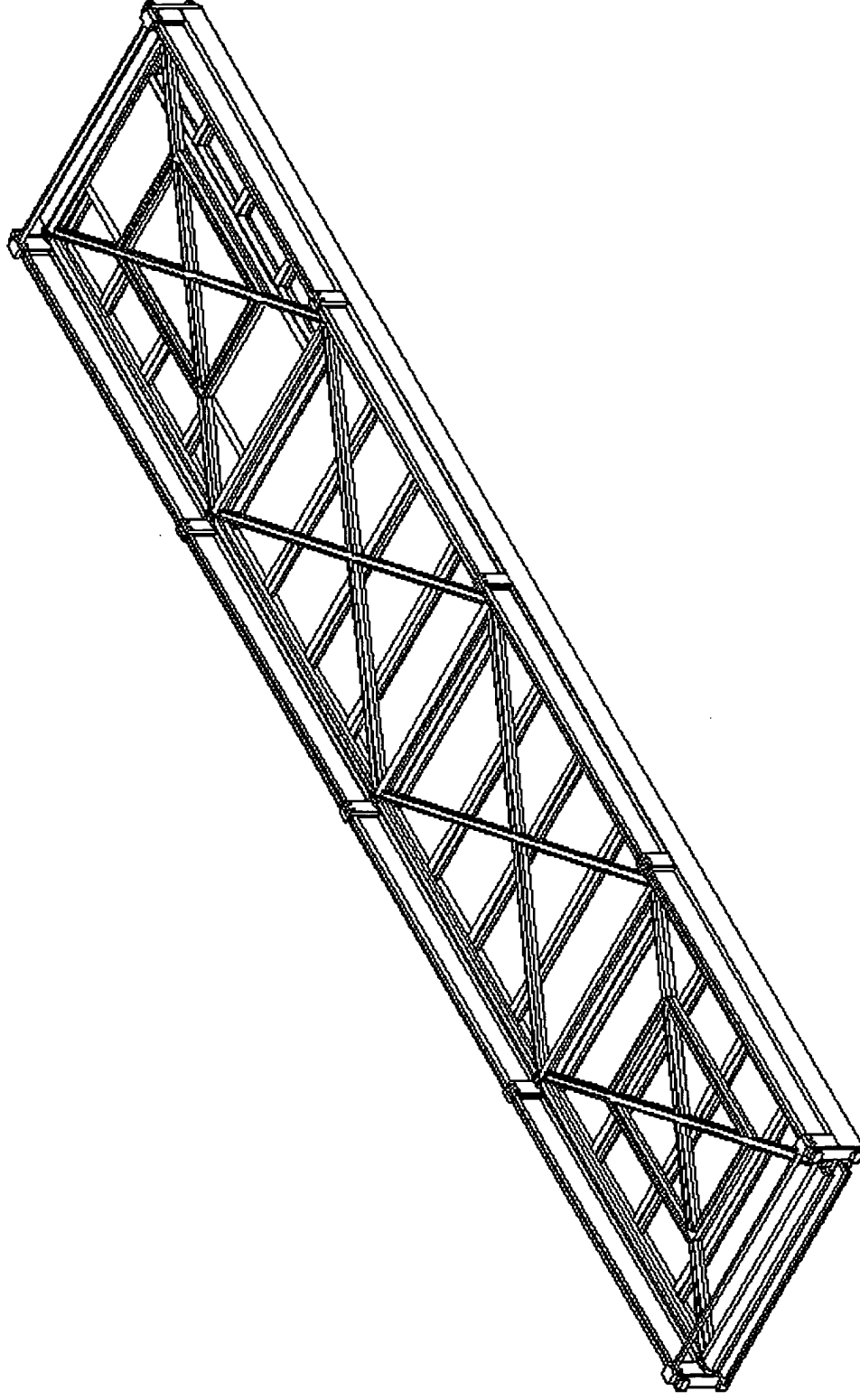


FIG. 39B: Step1 of disassemble and load process: The front and back frames of the shipping collapsible cargo container are stored in its own floor frame, and a base part is placed at each end. This 40 foot high cube shipping collapsible cargo container floor frame panel is now referred as "shipping floor frame panel".

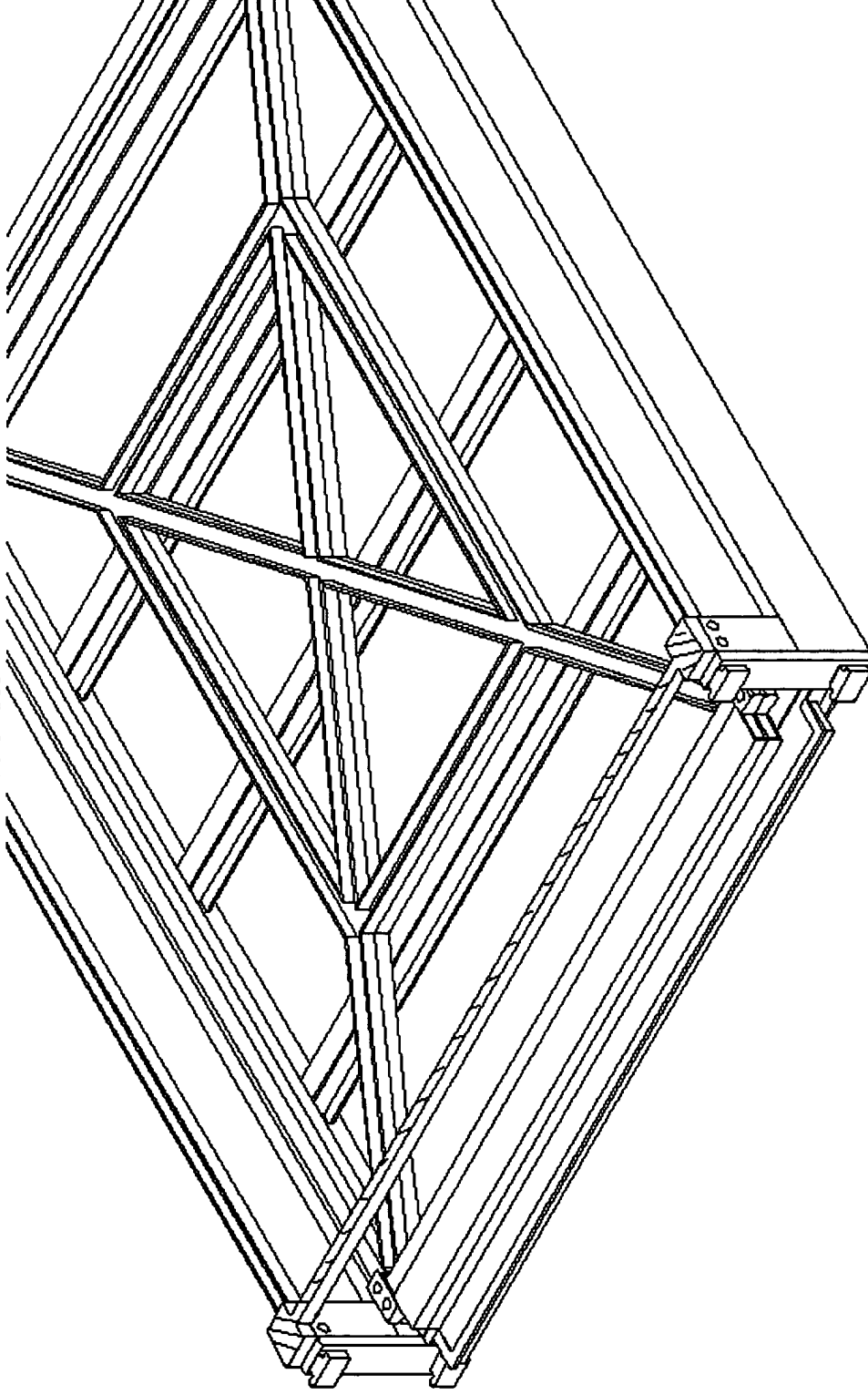


FIG. 40B: Enlarged view based on FIG. 39B to show the base part position indicated by shaded lines

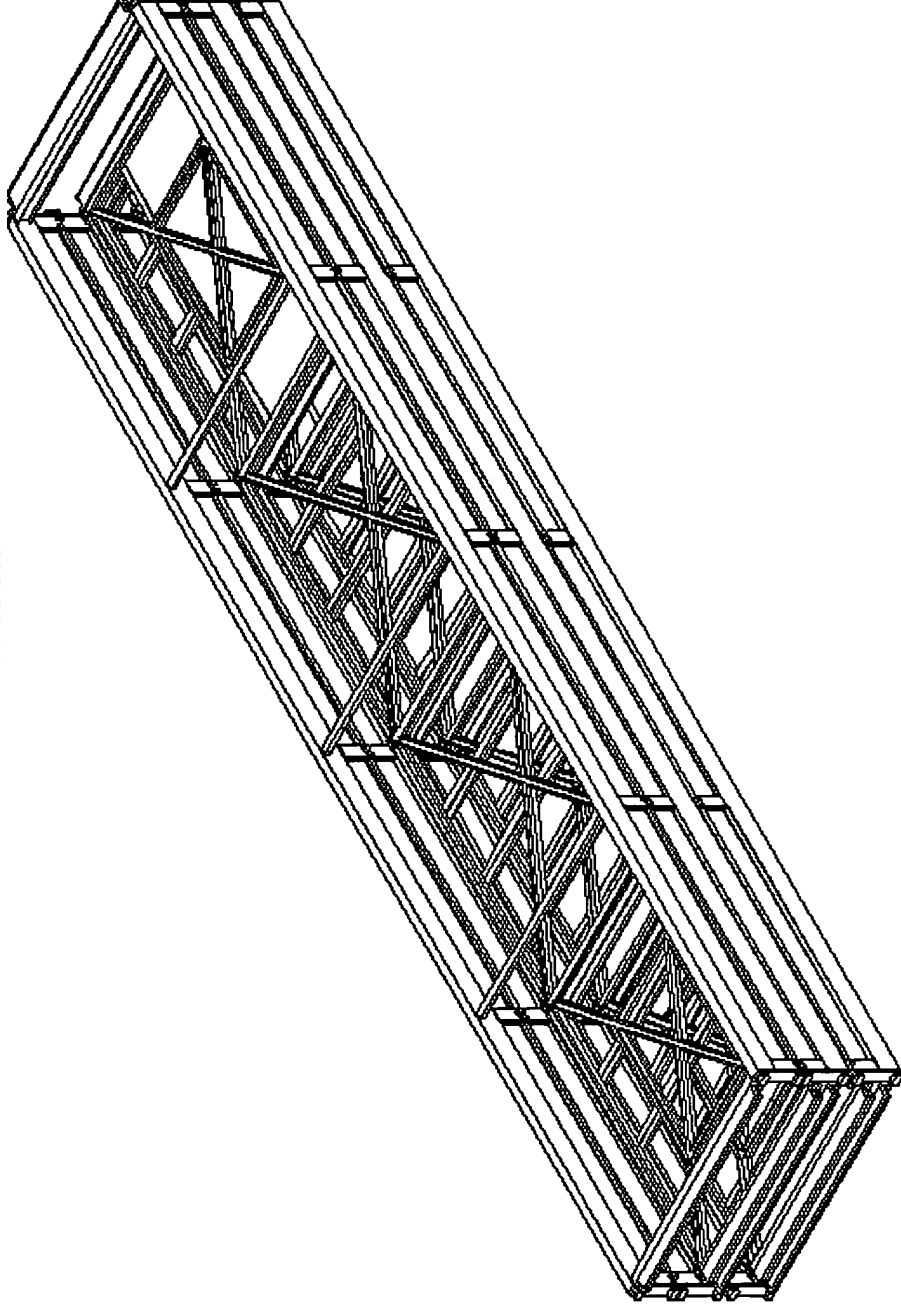


FIG. 41B: Step2 of disassemble and load process: The first “collapsible cargo container frame panel assembly” is stacked on top of previous assembly.

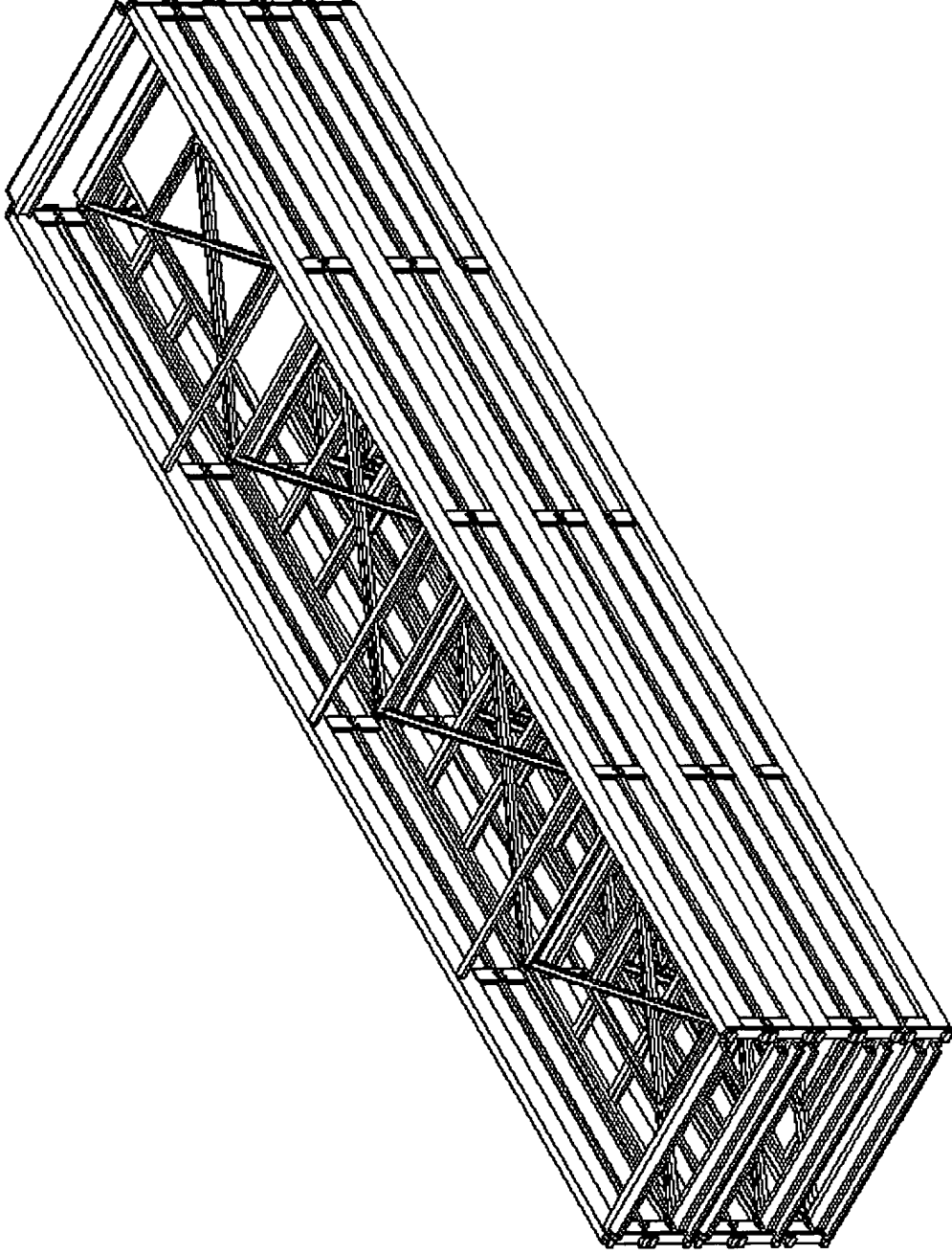


FIG. 42B: Step3 of disassemble and load process: The second "collapsible cargo container frame panel assembly" is stacked on top of previous assembly.

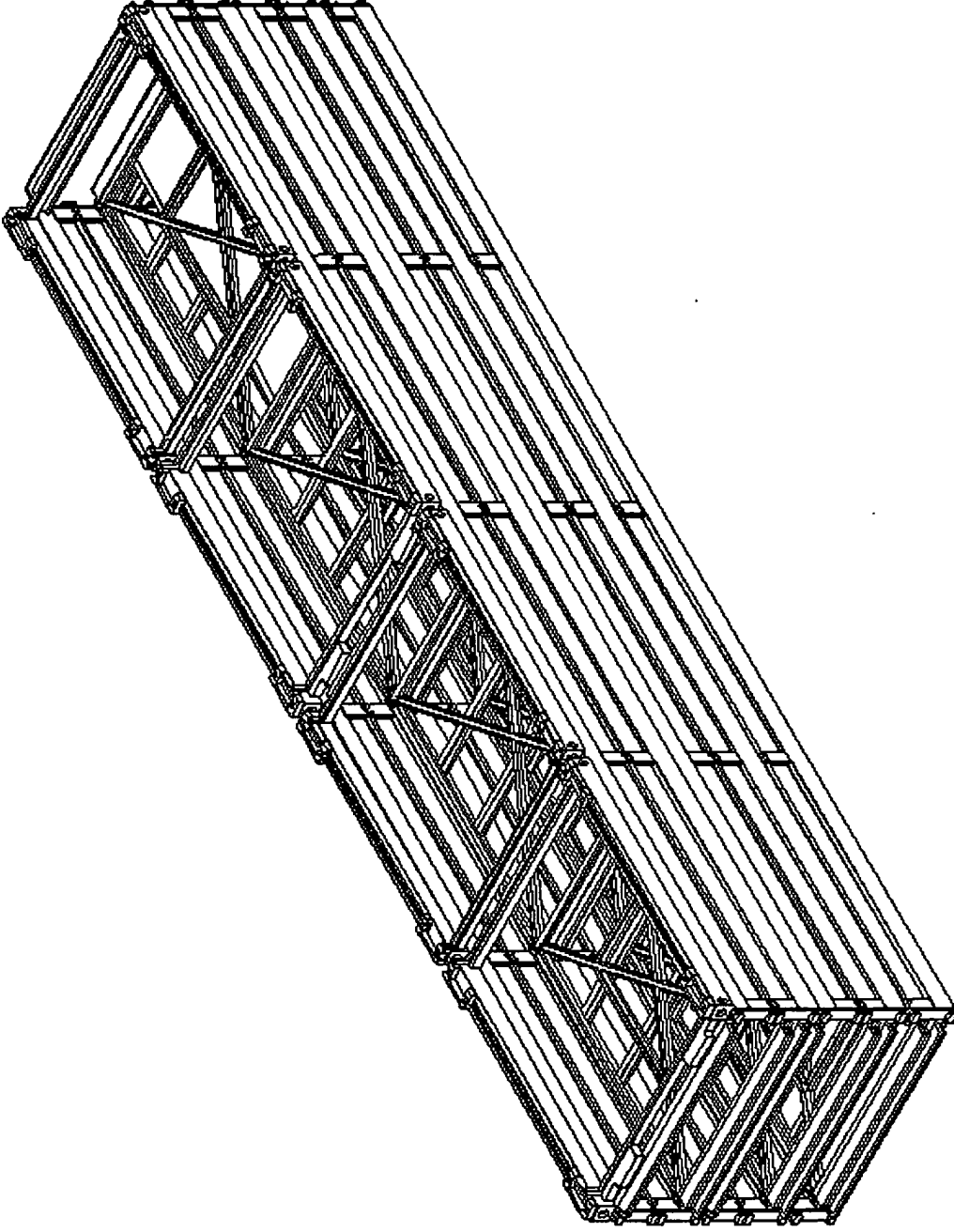


FIG. 43B: Step4 of disassemble and load process: The left and right frames from 2 disassembled cargo containers are stacked on top of the previous assembly.

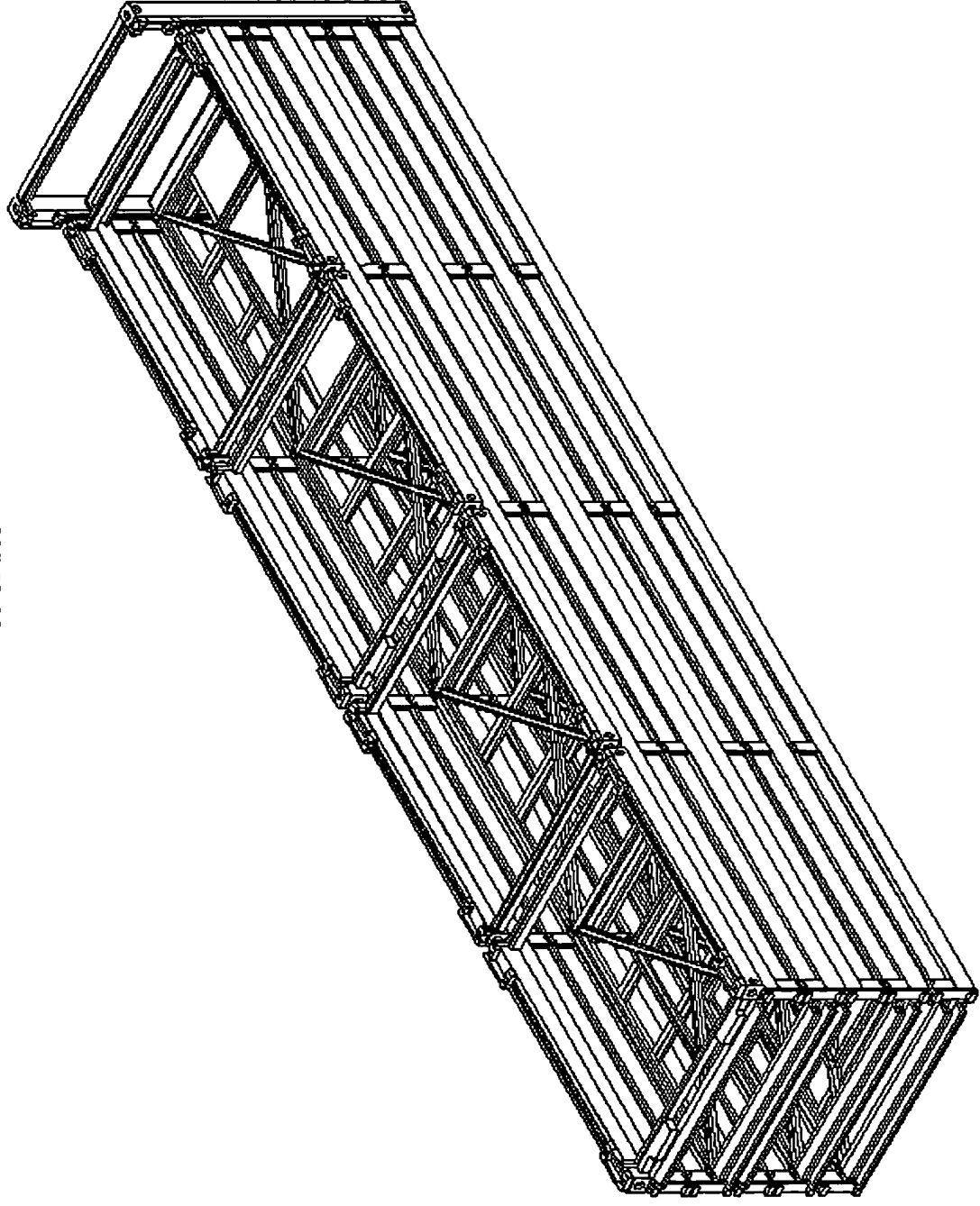


FIG. 44B: Step5 of disassemble and load process: The left frame of the shipping collapsible cargo container is assembled.

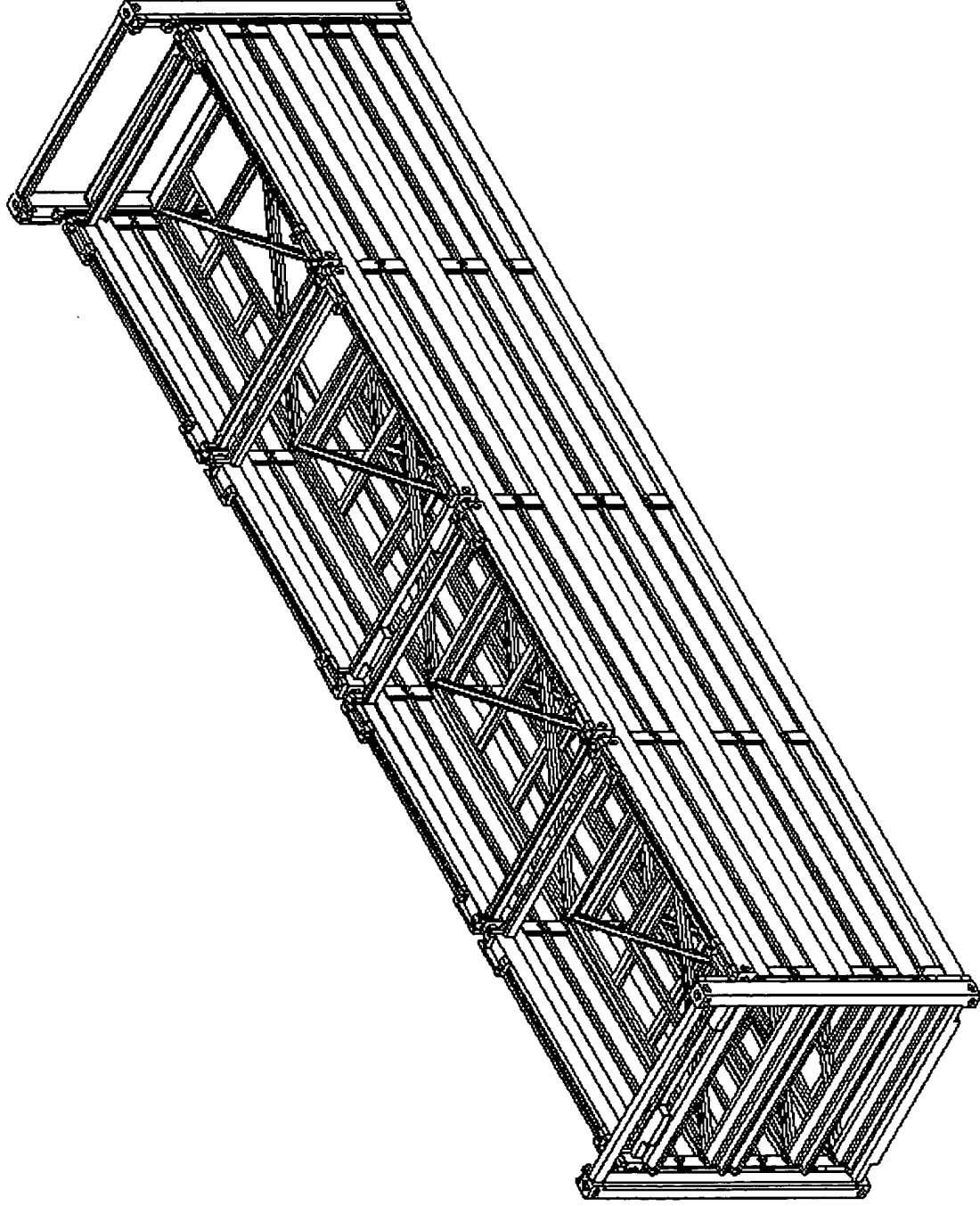


FIG. 45B: Step6 of disassemble and load process: The right frame of the shipping collapsible cargo container is assembled.

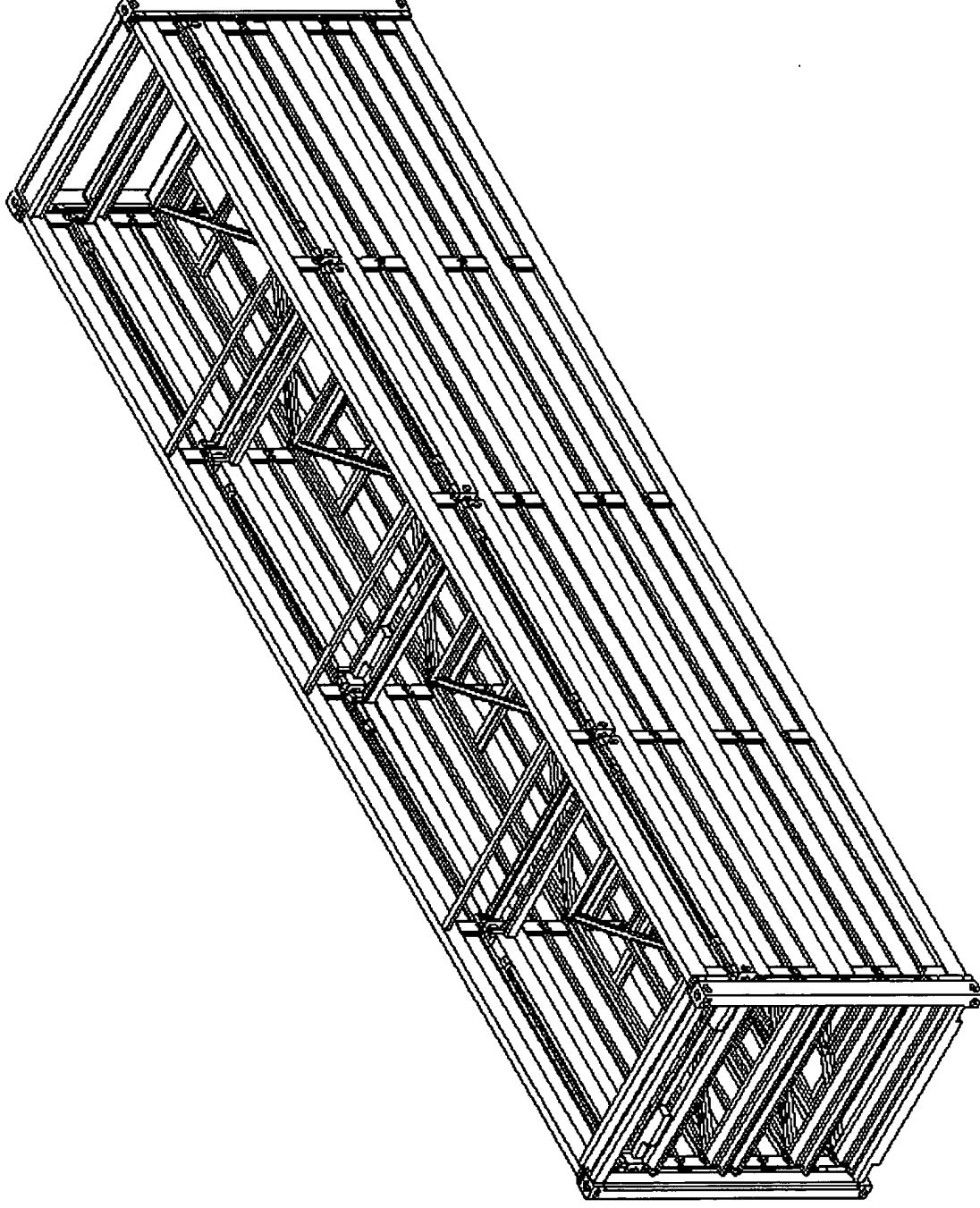


FIG. 46B: Step7 of disassemble and load process: The ceiling frame of the shipping collapsible cargo container is assembled.

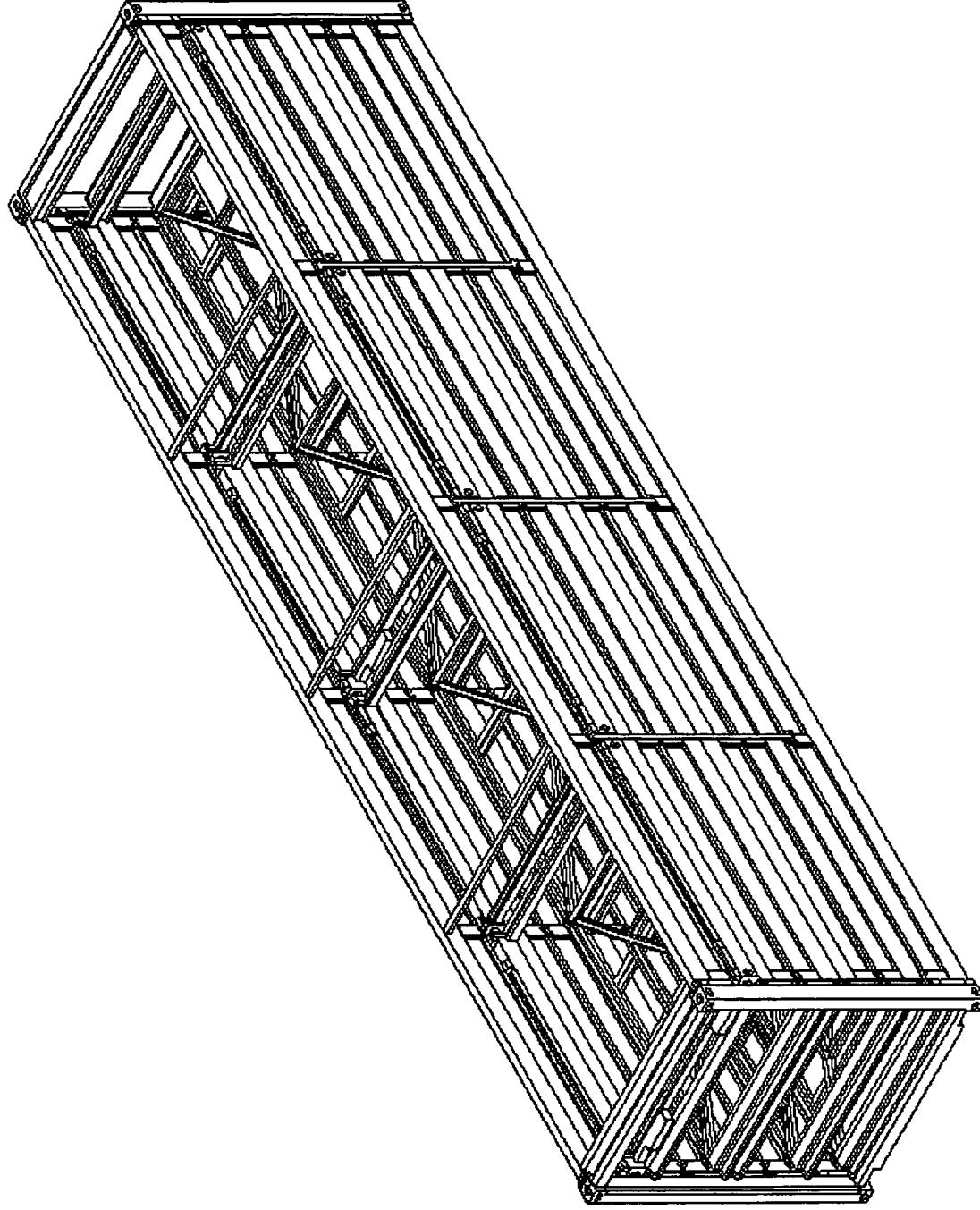


FIG. 47B: Step8 of disassemble and load process: The six vertical beams are assembled.

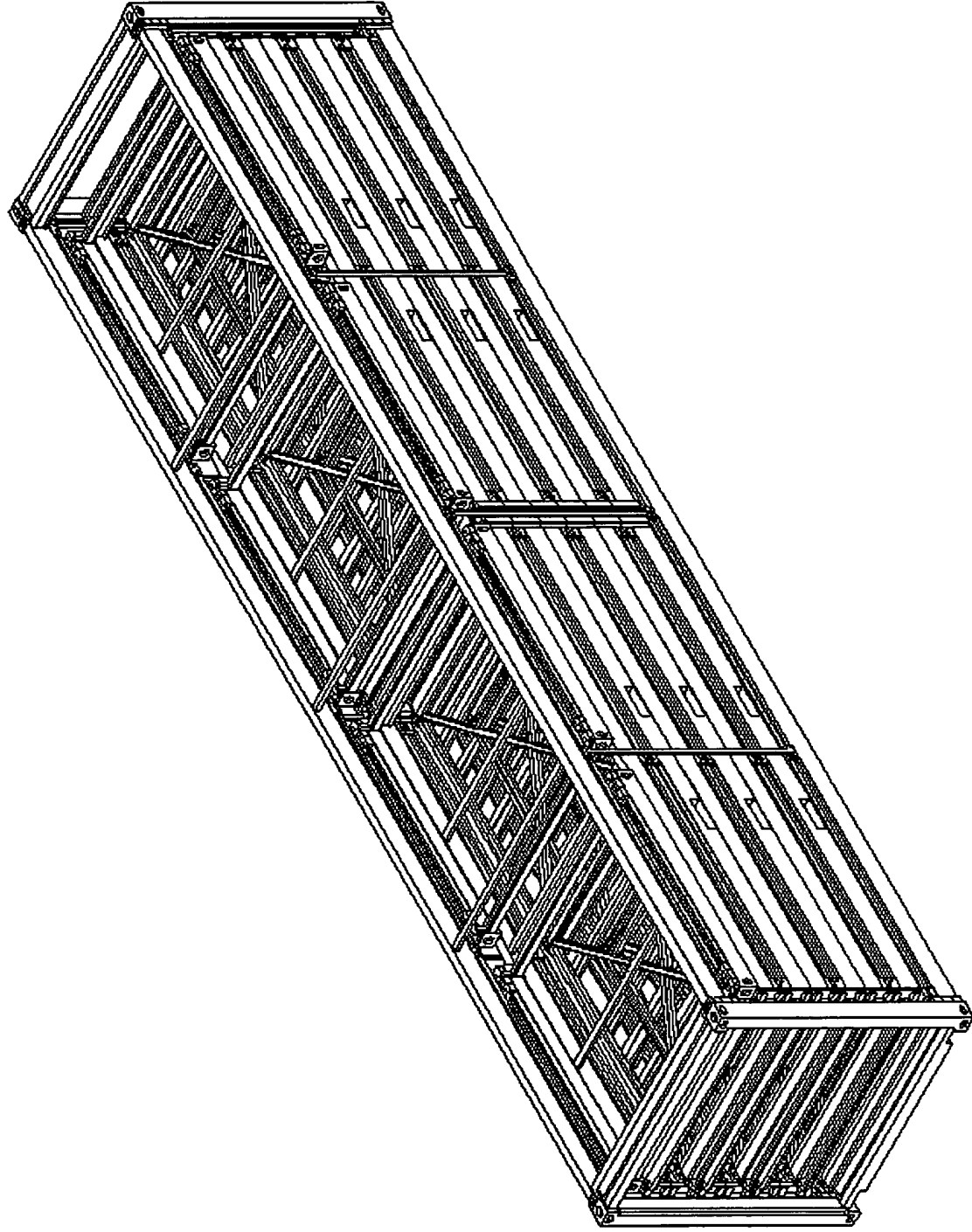


FIG. 1C: Basic isometric view of the 40 foot collapsible cargo container frame loaded with six collapsed 20 foot collapsible cargo container frame panels, it is referred as "shipping collapsible cargo container".

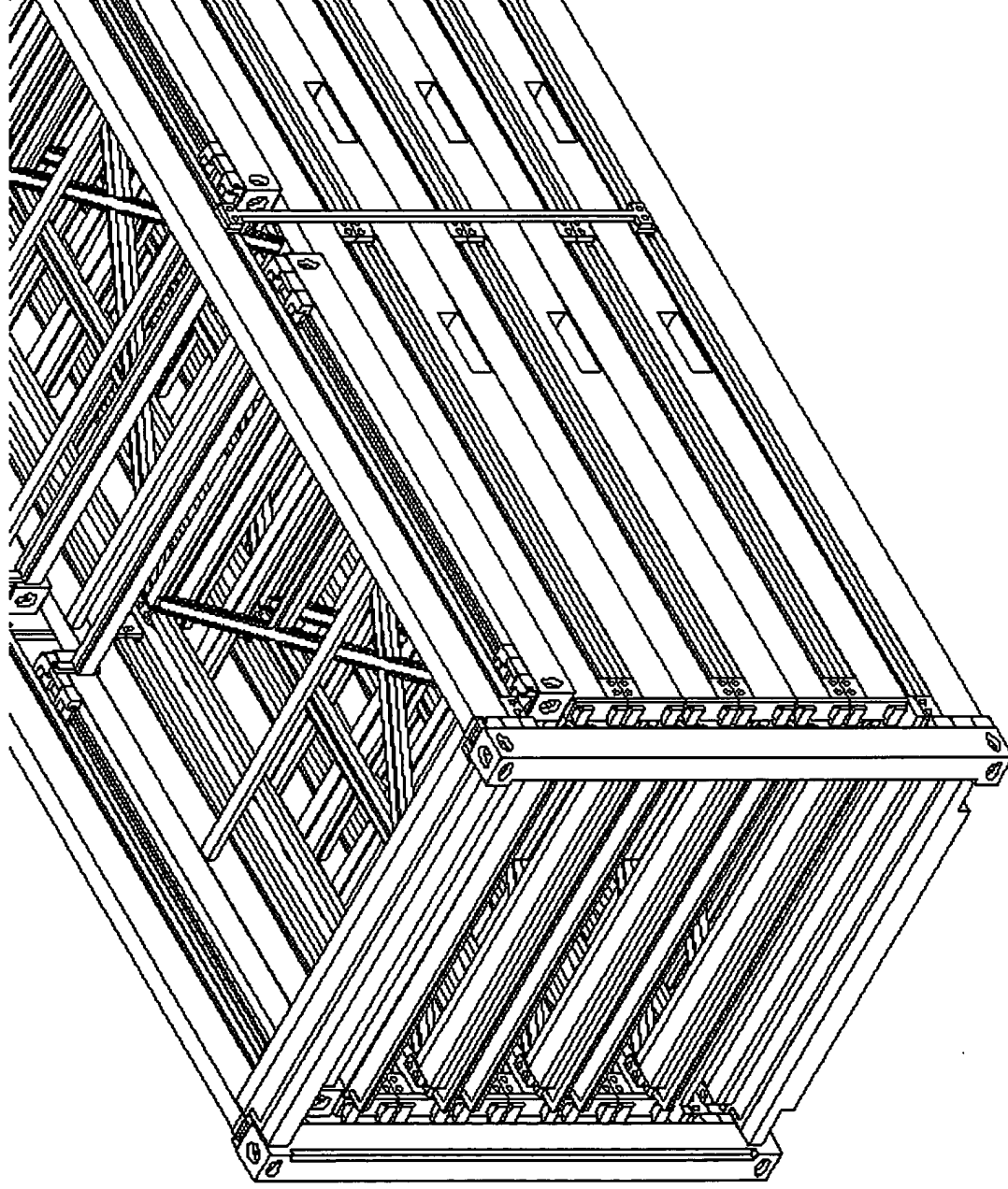


FIG. 2C: Detailed isometric view of the 40 foot collapsible cargo container frame loaded with six collapsed 20 foot collapsible cargo container frame panels

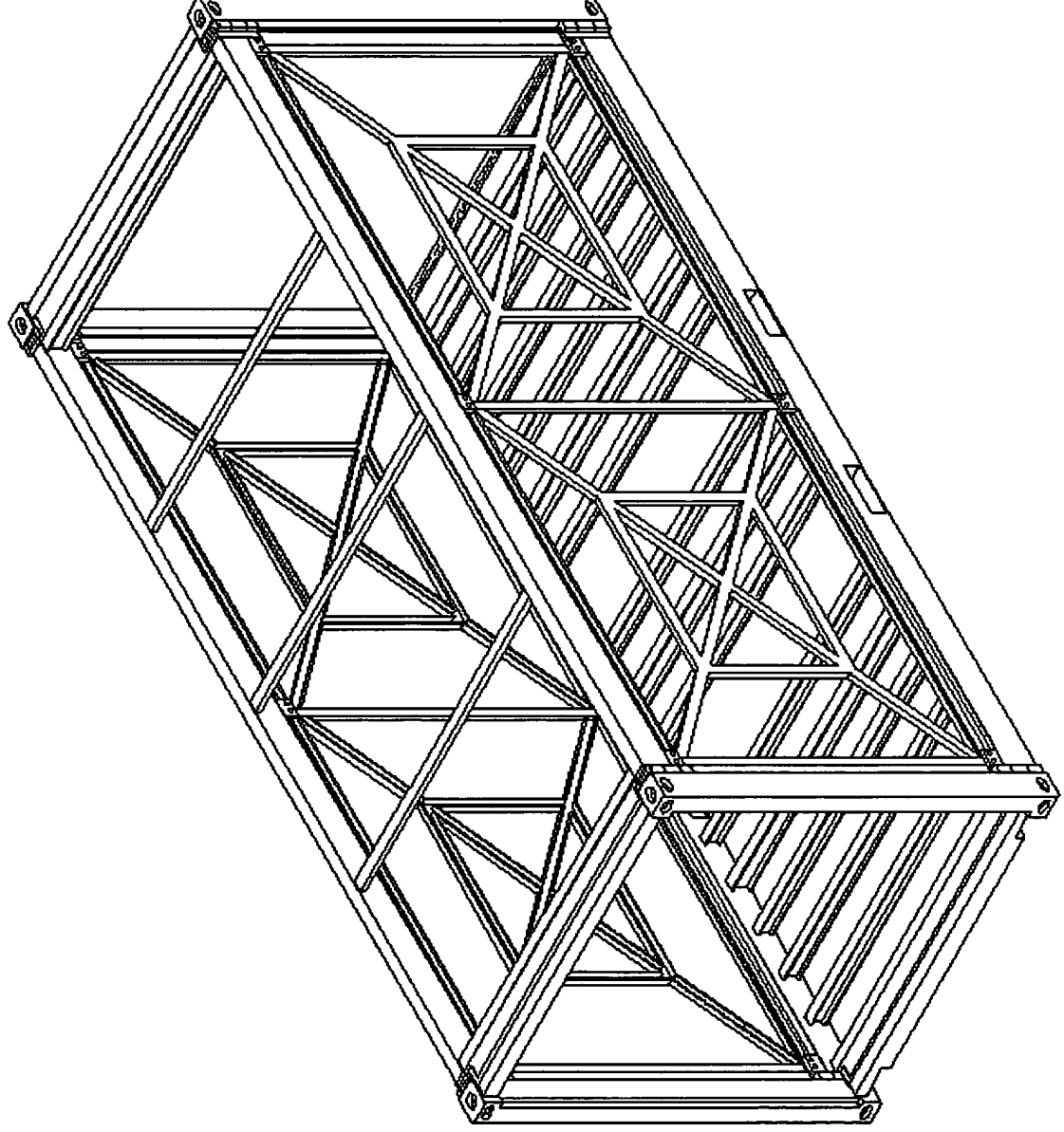
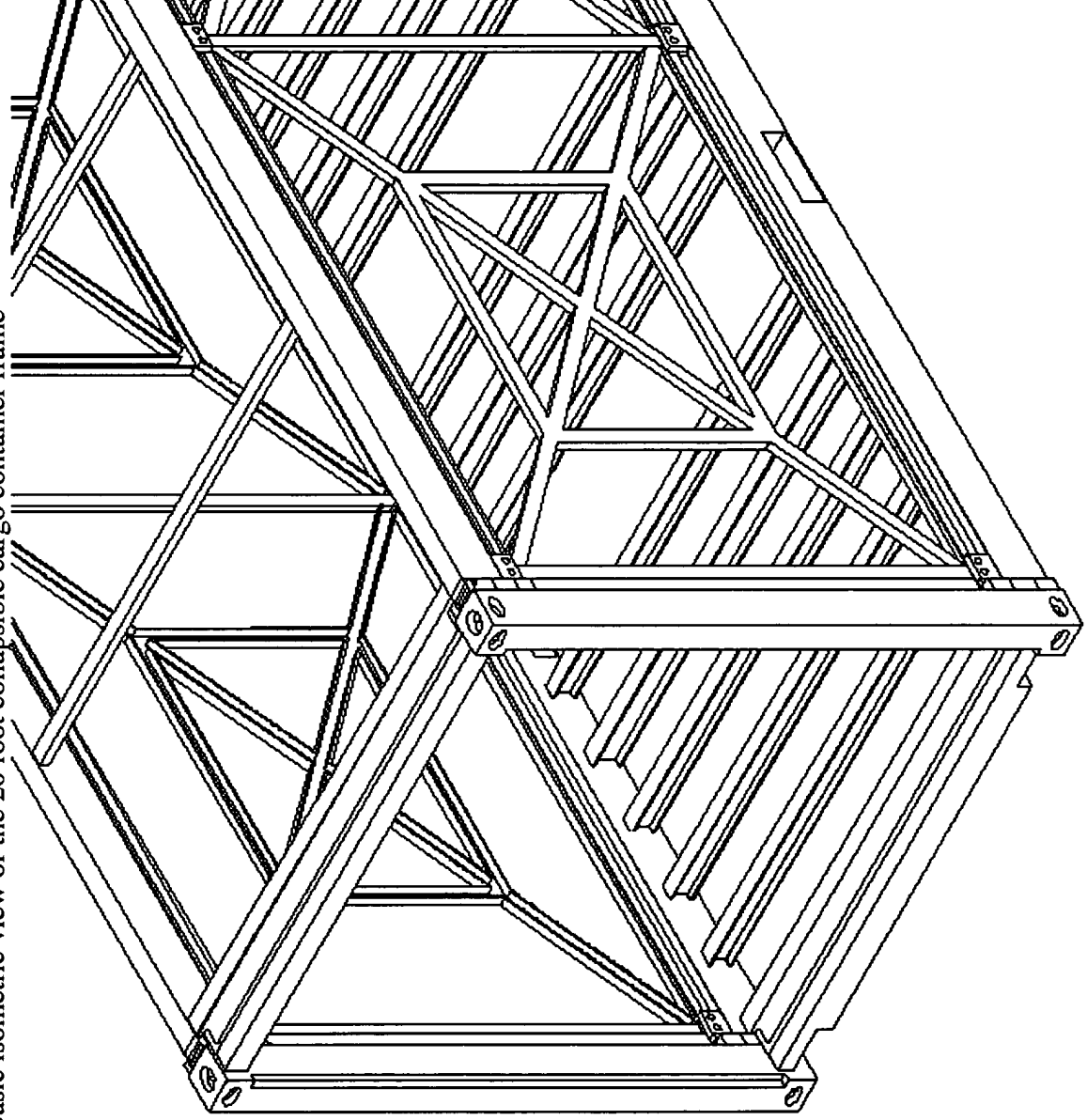


FIG. 3C: Basic isometric view of the 20 foot collapsible cargo container frame



COLLAPSIBLE CARGO CONTAINER
Dennis Zhu Ouyang 847-781-5319

88 of 185

FIG. 4C: Enlarged isometric view of the right end of a 20 foot collapsible cargo container

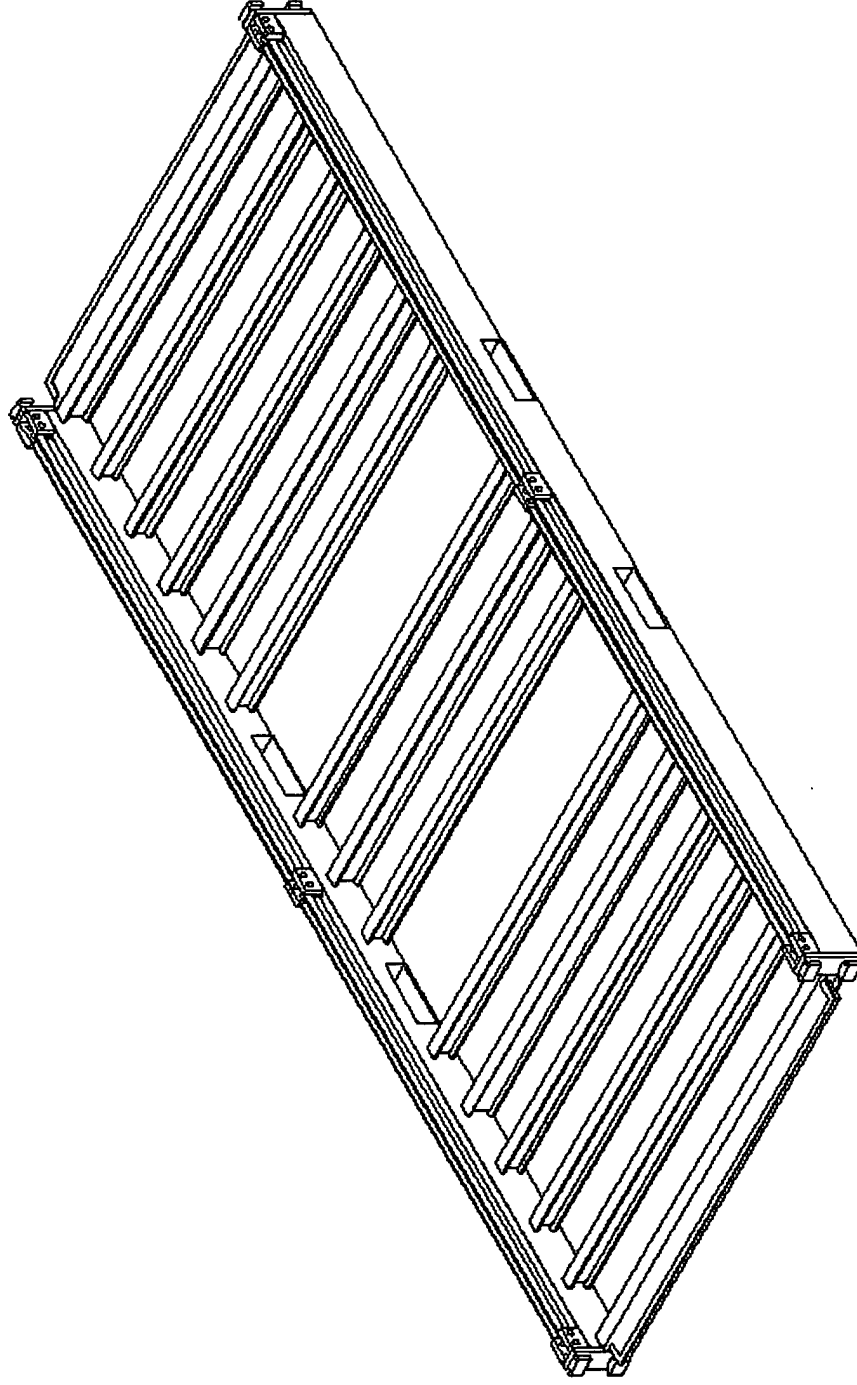
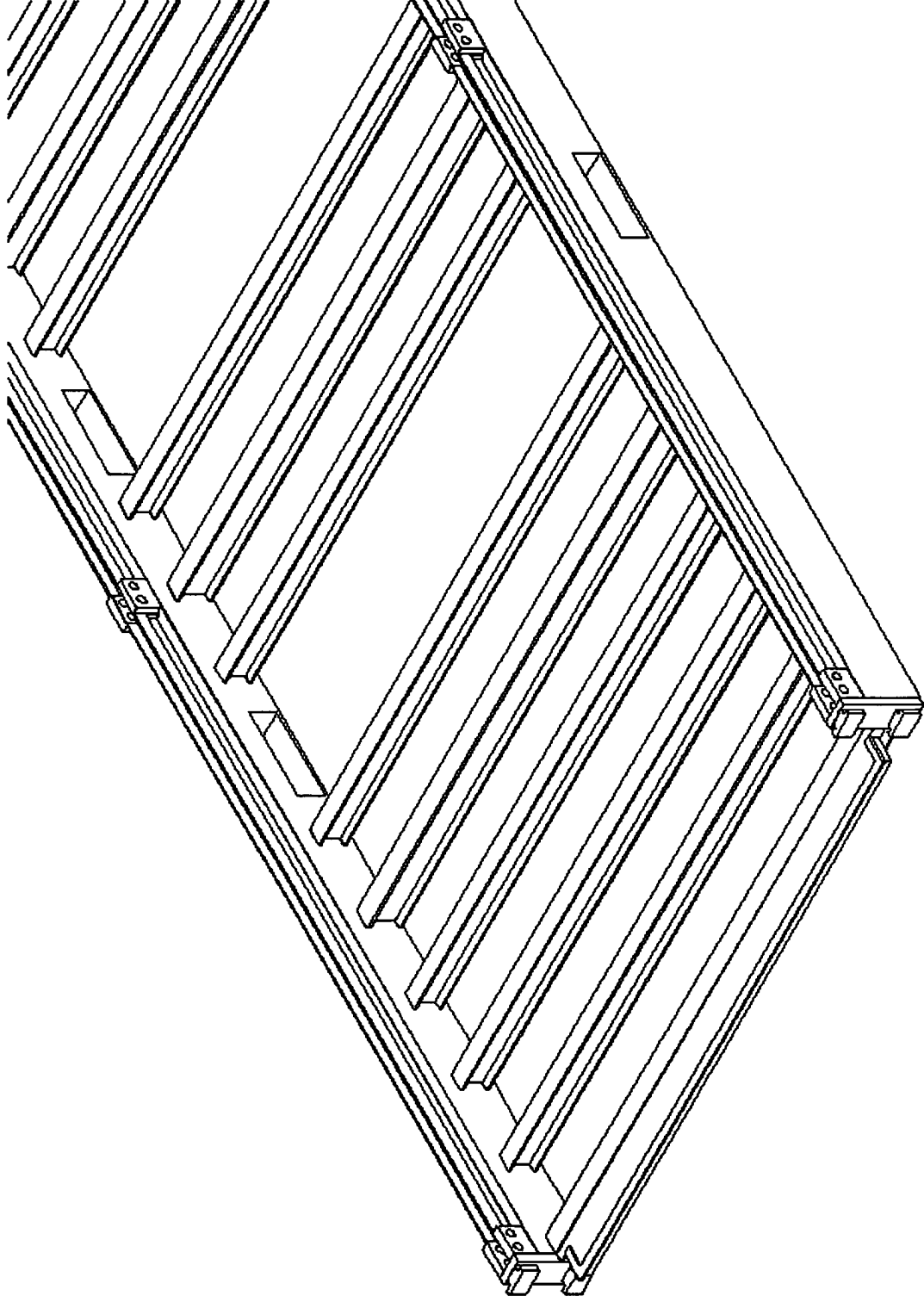


FIG. 6C: Basic isometric view of the floor frame (20 foot collapsible cargo container)

COLLAPSIBLE CARGO CONTAINER
Dennis Zhu Ouyang 847-781-5319

89 of 185



COLLAPSIBLE CARGO CONTAINER
Dennis Zhu Ouyang 847-781-5319

90 of 185

FIG. 12C: Isometric view of the right end of a floor frame (20 foot collapsible cargo container)

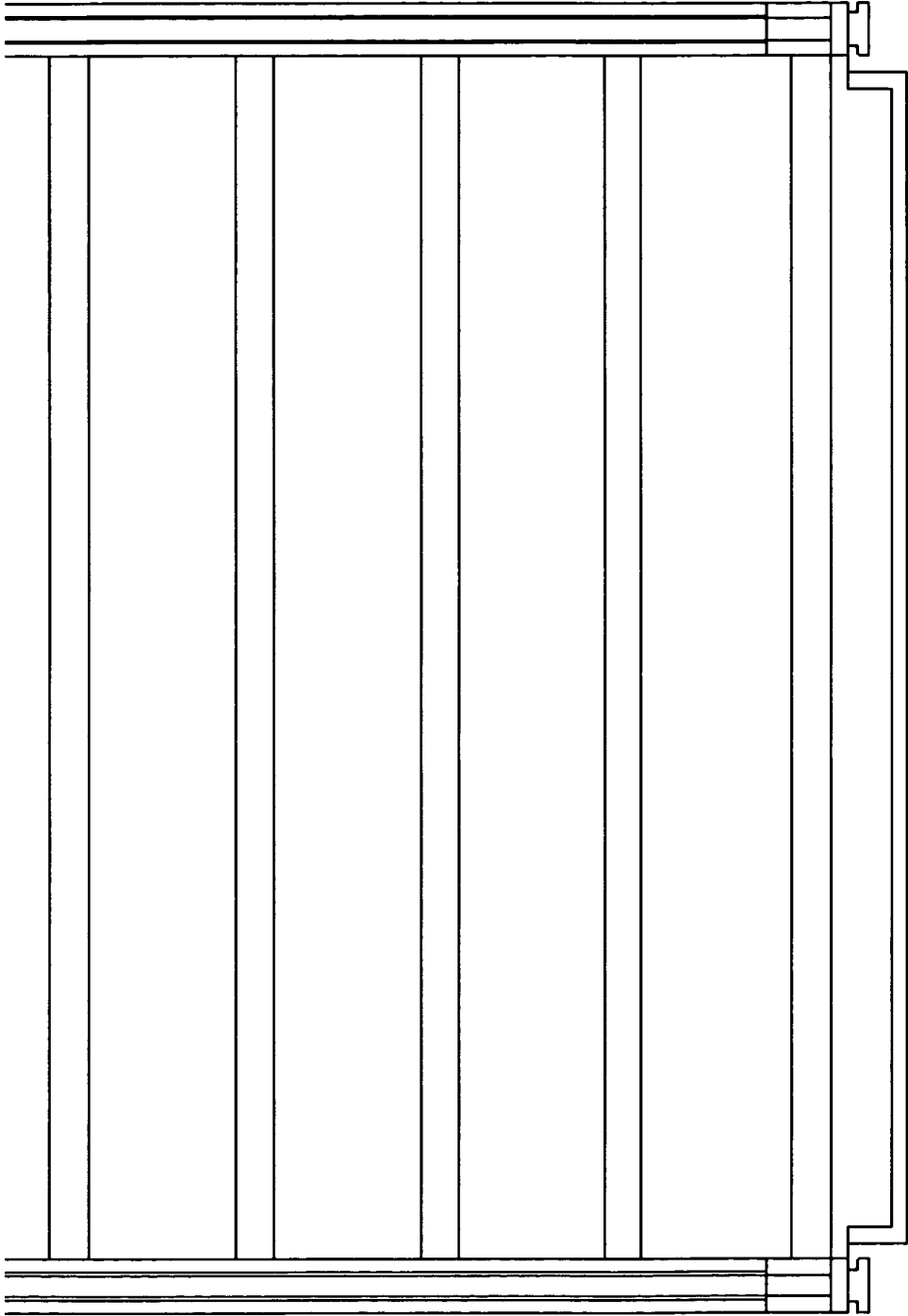


FIG. 13C: Top view of the right end of a floor frame (20 foot collapsible cargo container)



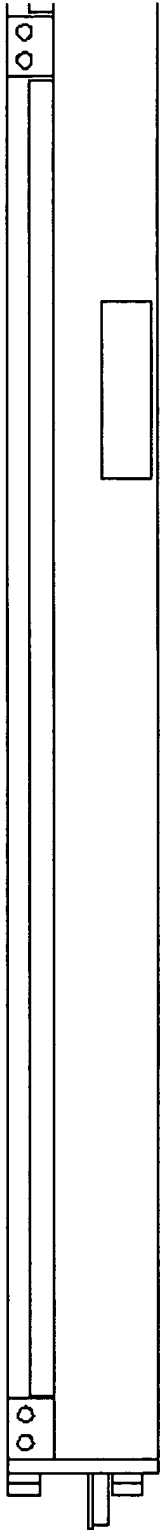


FIG. 14C: Front view of the right end of a floor frame (20 foot collapsible cargo container)

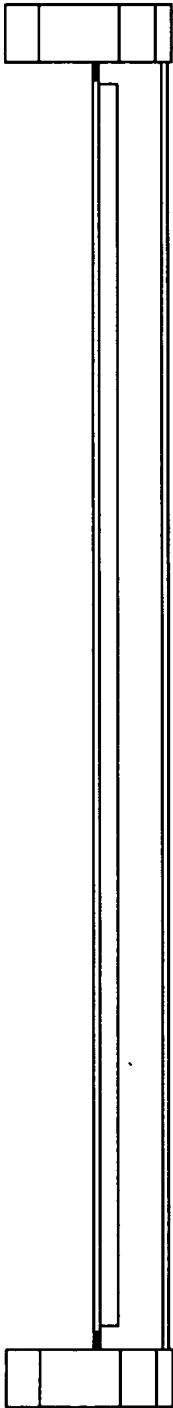


FIG. 15C: Right view of a floor frame (20 foot collapsible cargo container)

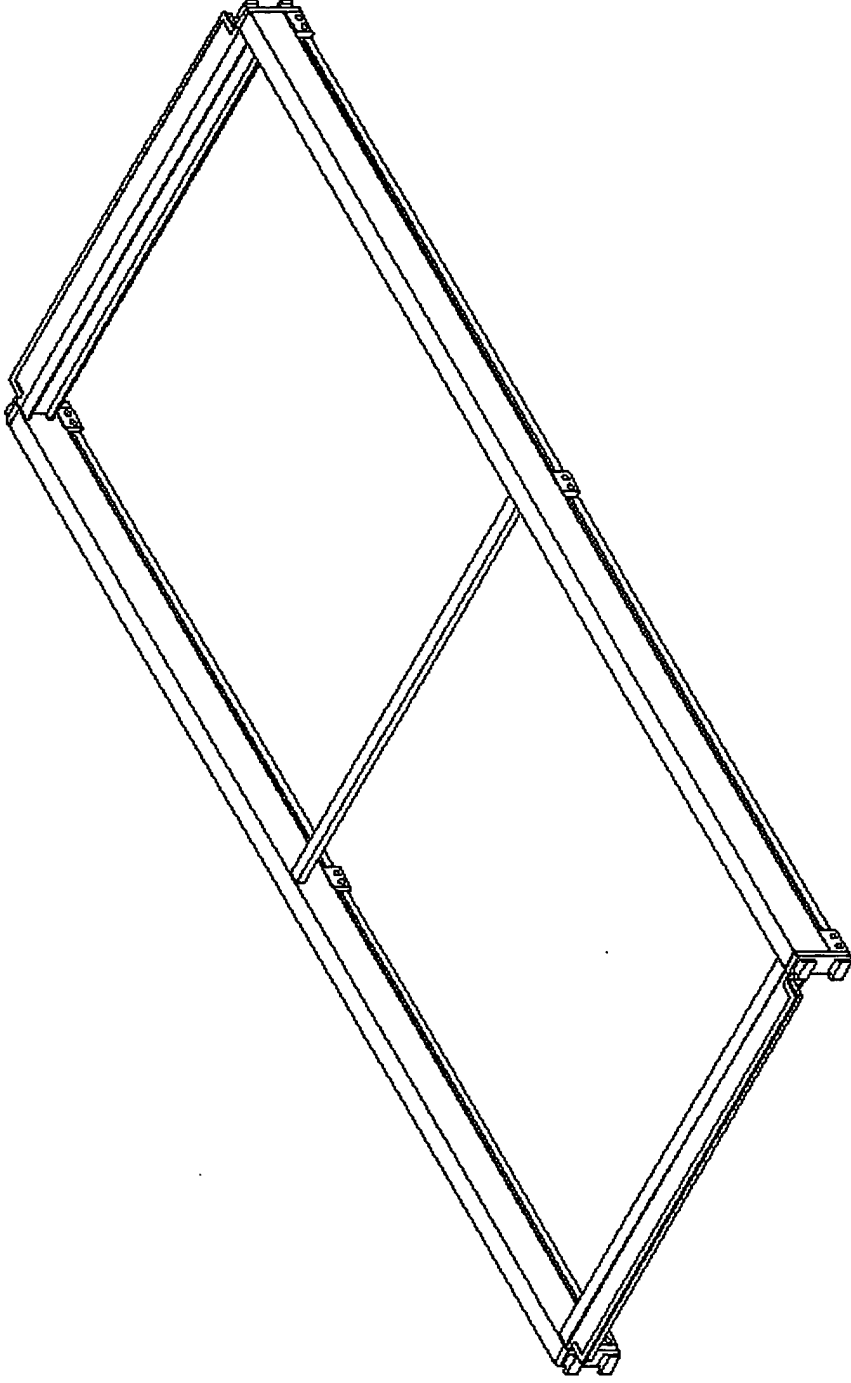


FIG. 16C: Isometric view of a ceiling frame (20 foot collapsible cargo container)

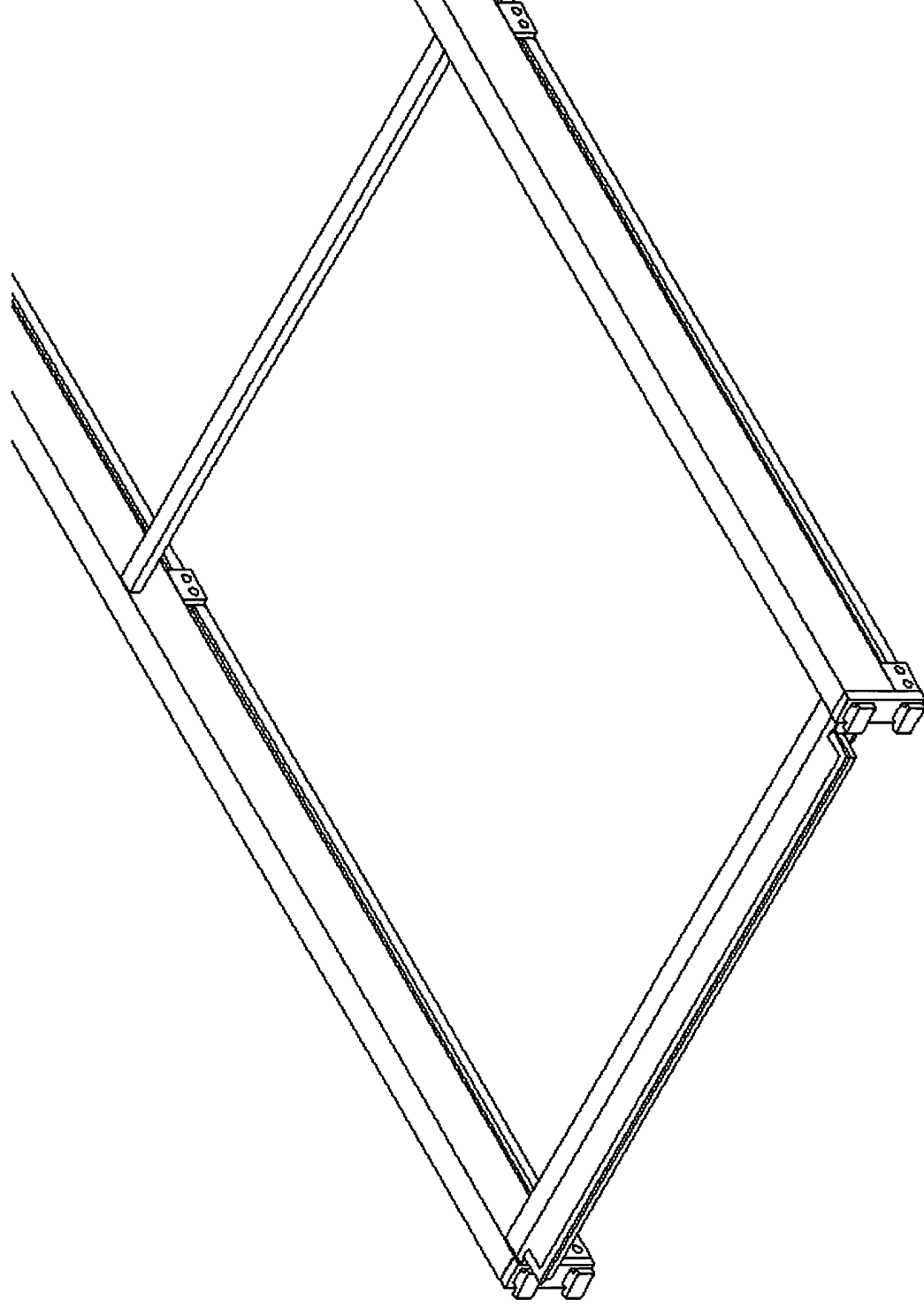


FIG. 21C: Isometric view of the right end of a ceiling frame (20 foot collapsible cargo container)

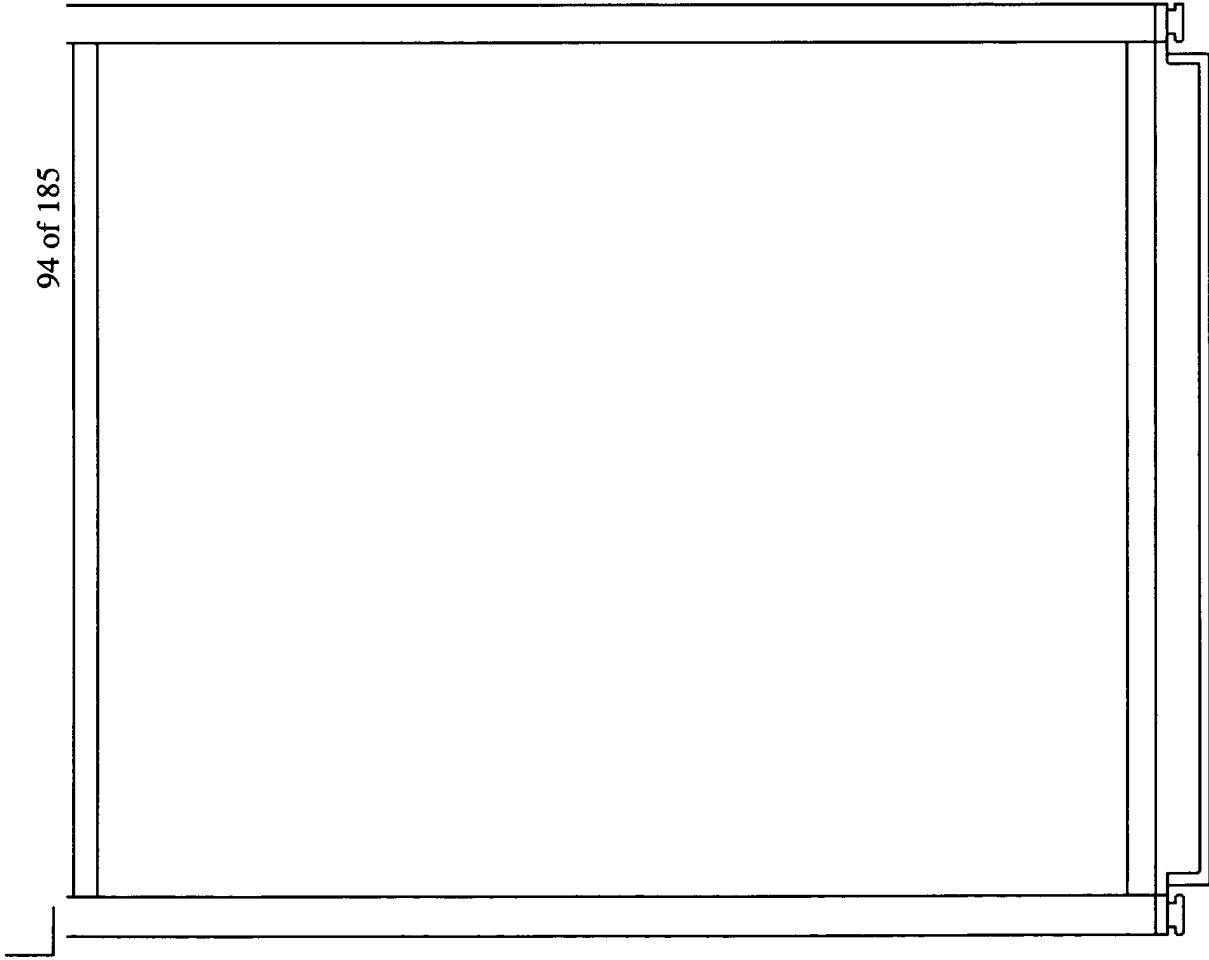


FIG. 22C: Top view of the right end of a ceiling frame (20 foot collapsible cargo container)

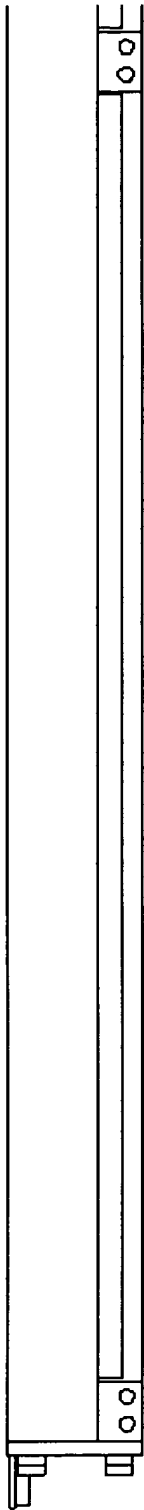


FIG. 23C: Front view of the right end of a ceiling frame (20 foot collapsible cargo container)

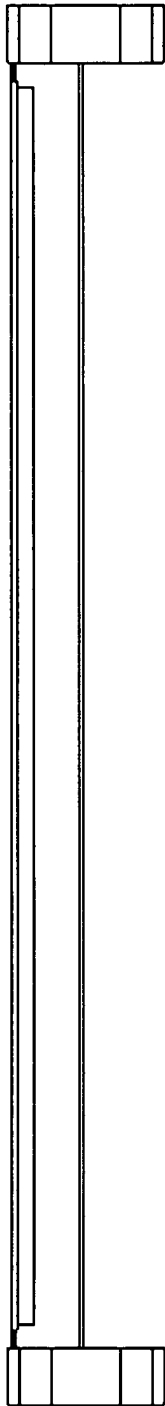


FIG. 24C: Right view of a ceiling frame (20 foot collapsible cargo container)

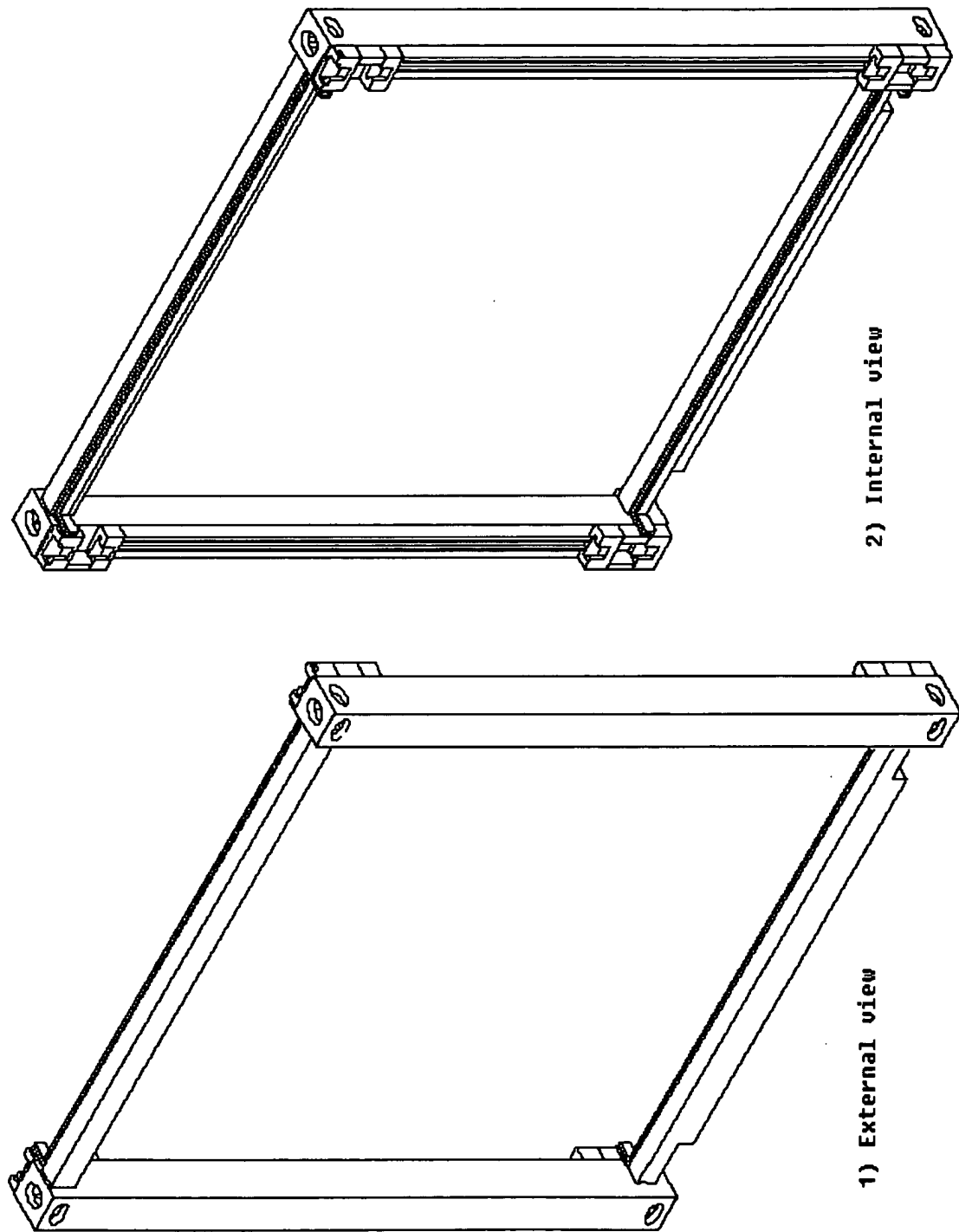


FIG. 25C: Isometric views of a left frame (20 foot collapsible cargo container)

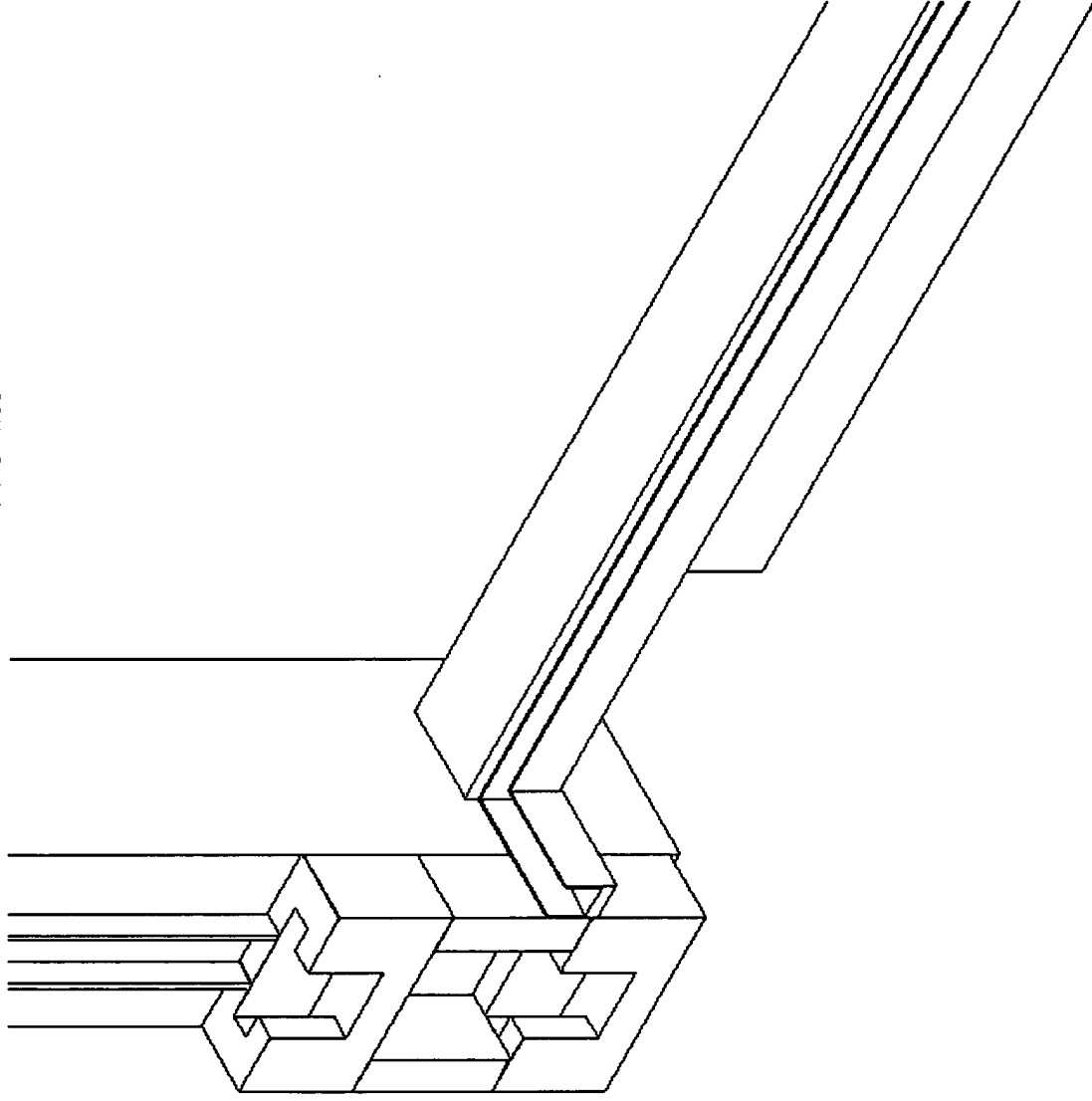


FIG. 26C: Isometric internal view of the corner of a left frame (20 foot collapsible cargo container)

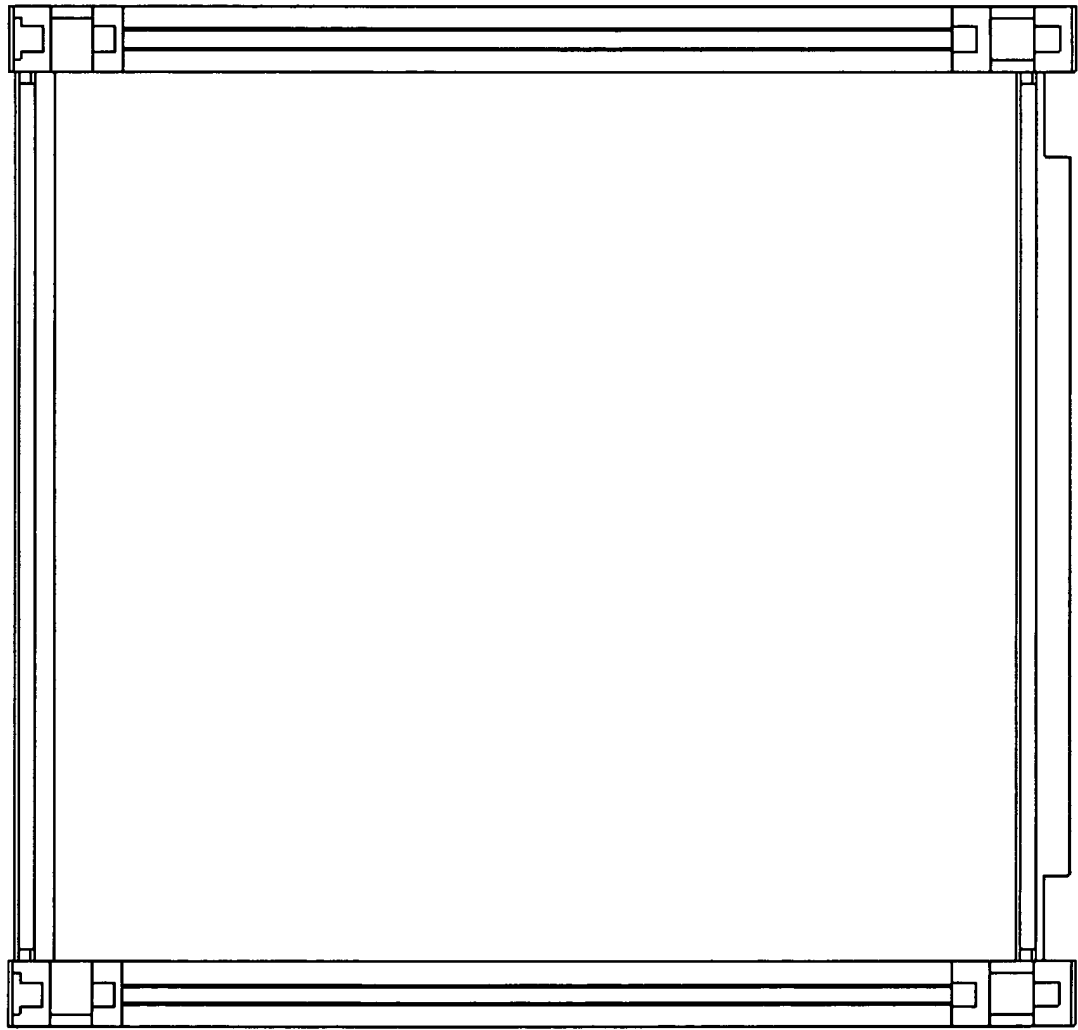


FIG. 27C: Internal view of a left frame (20 foot collapsible cargo container)

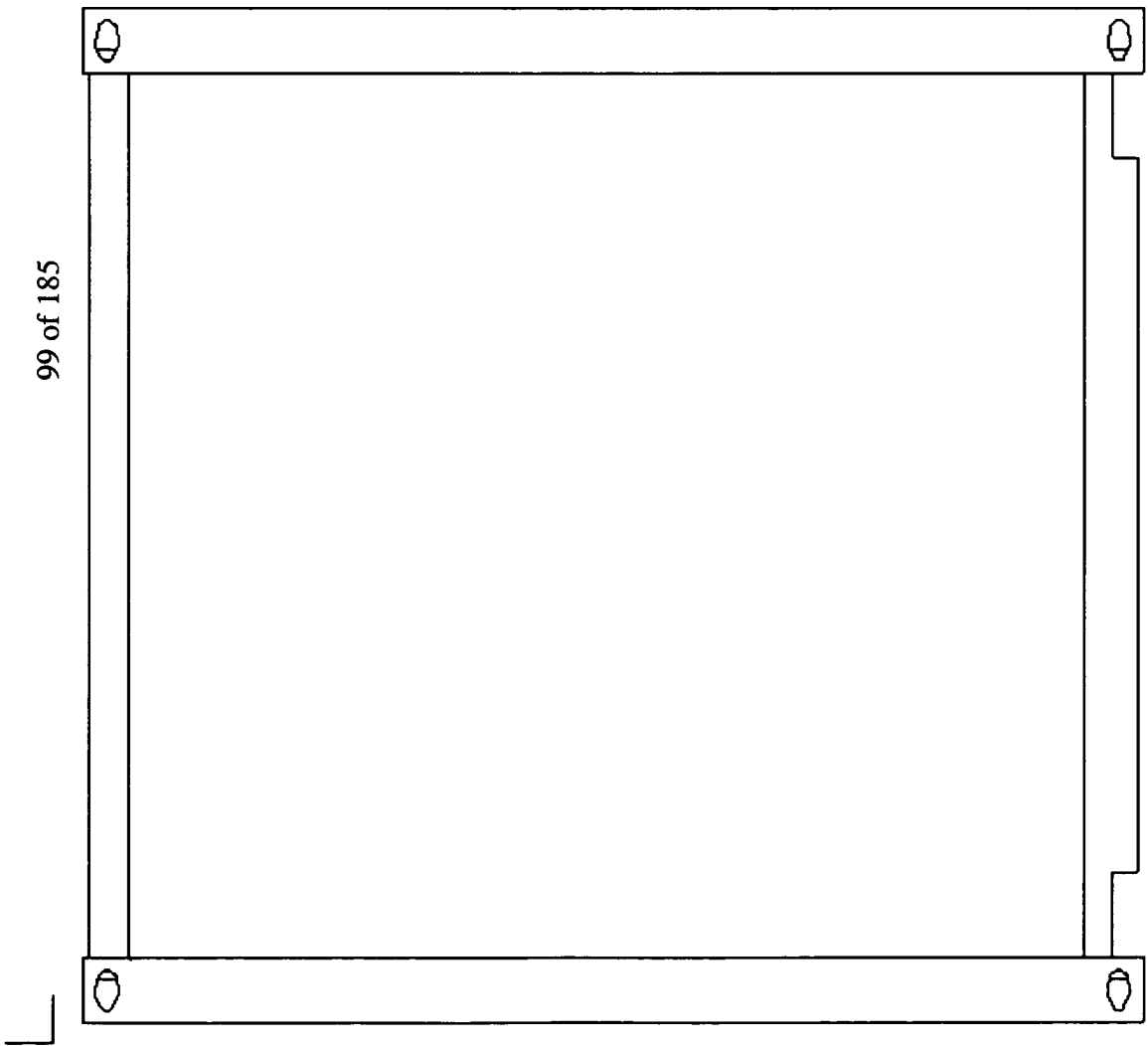


FIG. 28C: External view of a left frame (20 foot collapsible cargo container)

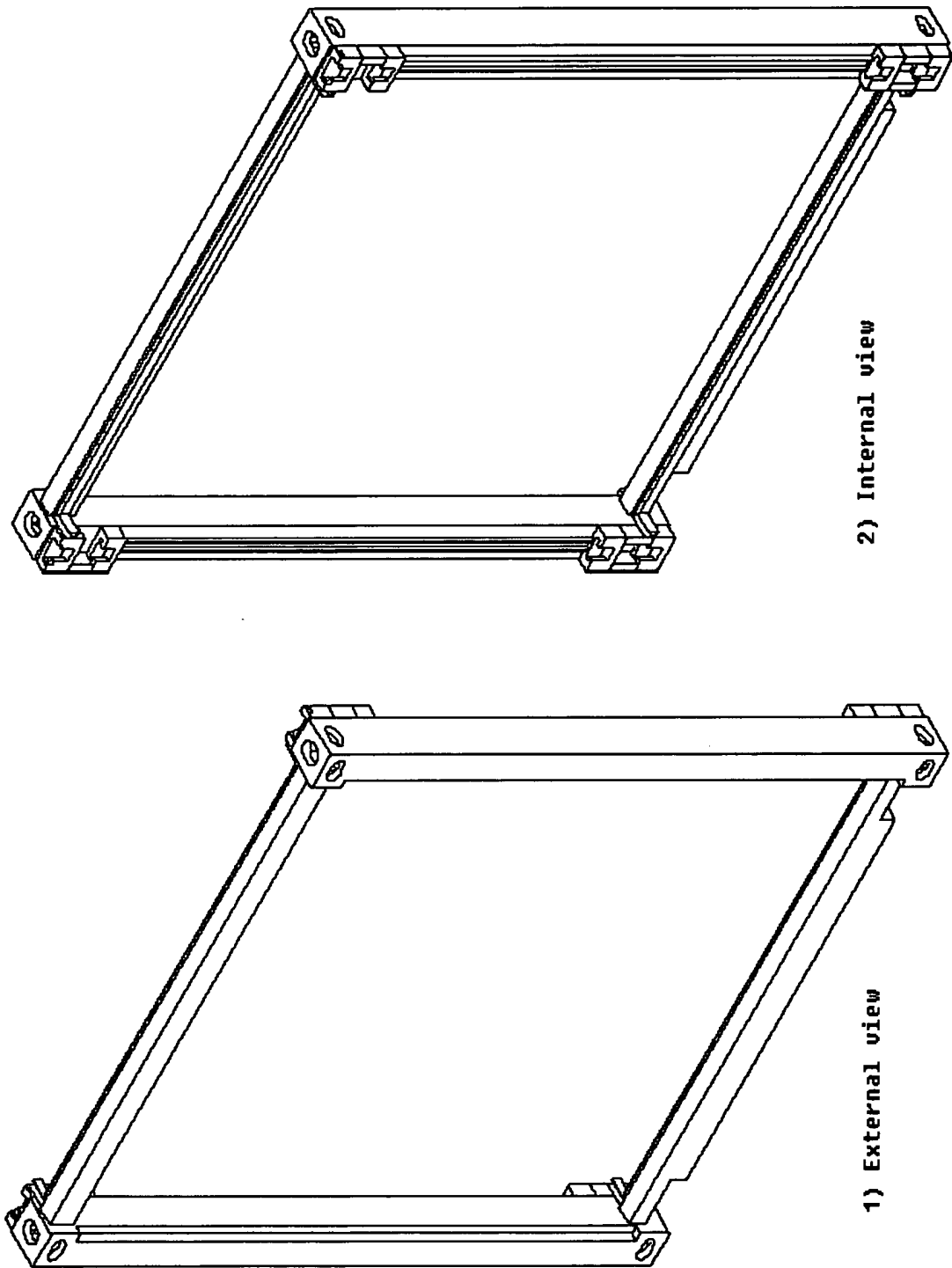


FIG. 29C: Isometric views of a right frame (20 foot collapsible cargo container)

101 of 185

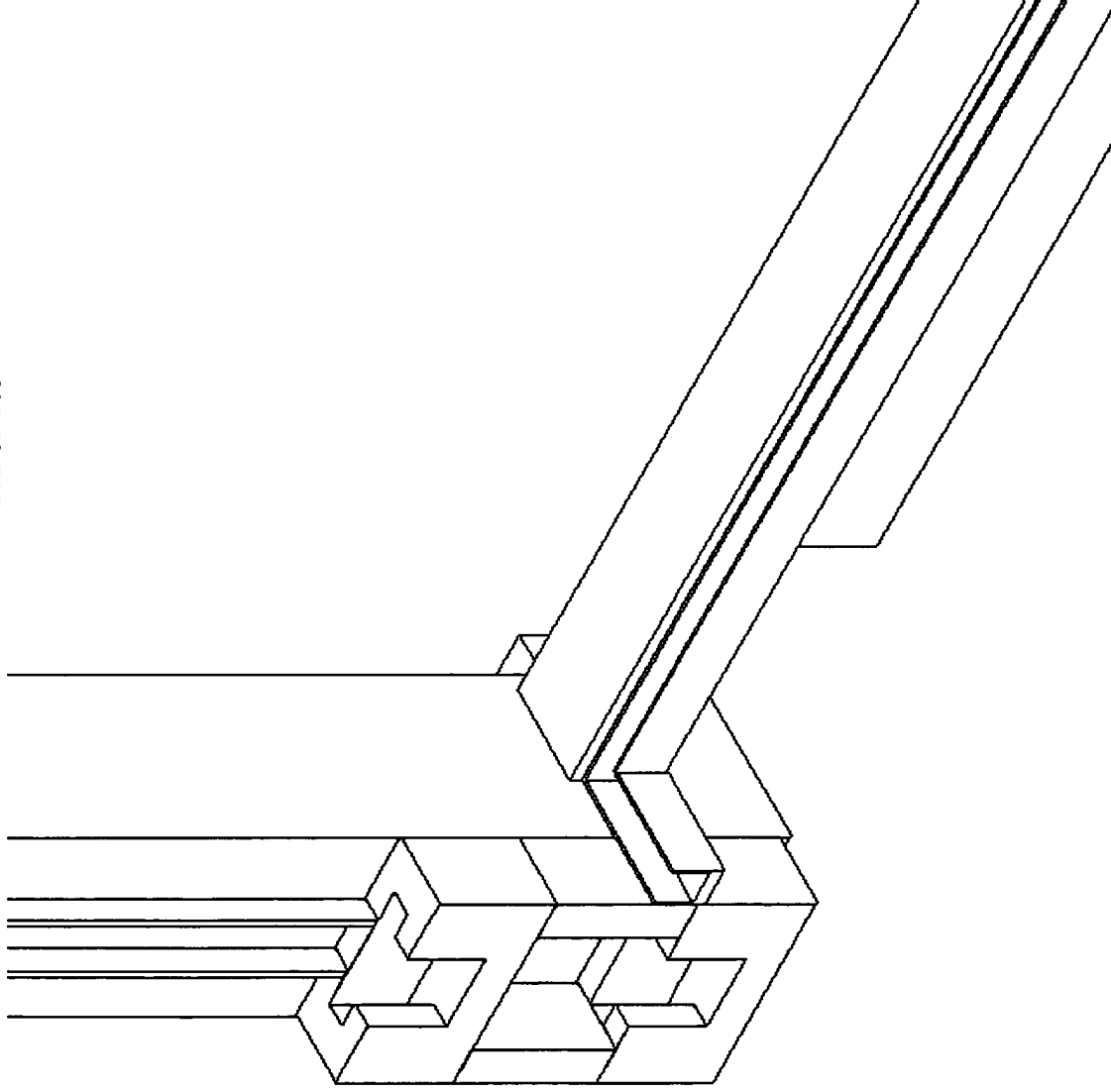


FIG. 30C: Isometric internal view of the corner of a right frame (20 foot collapsible cargo container)

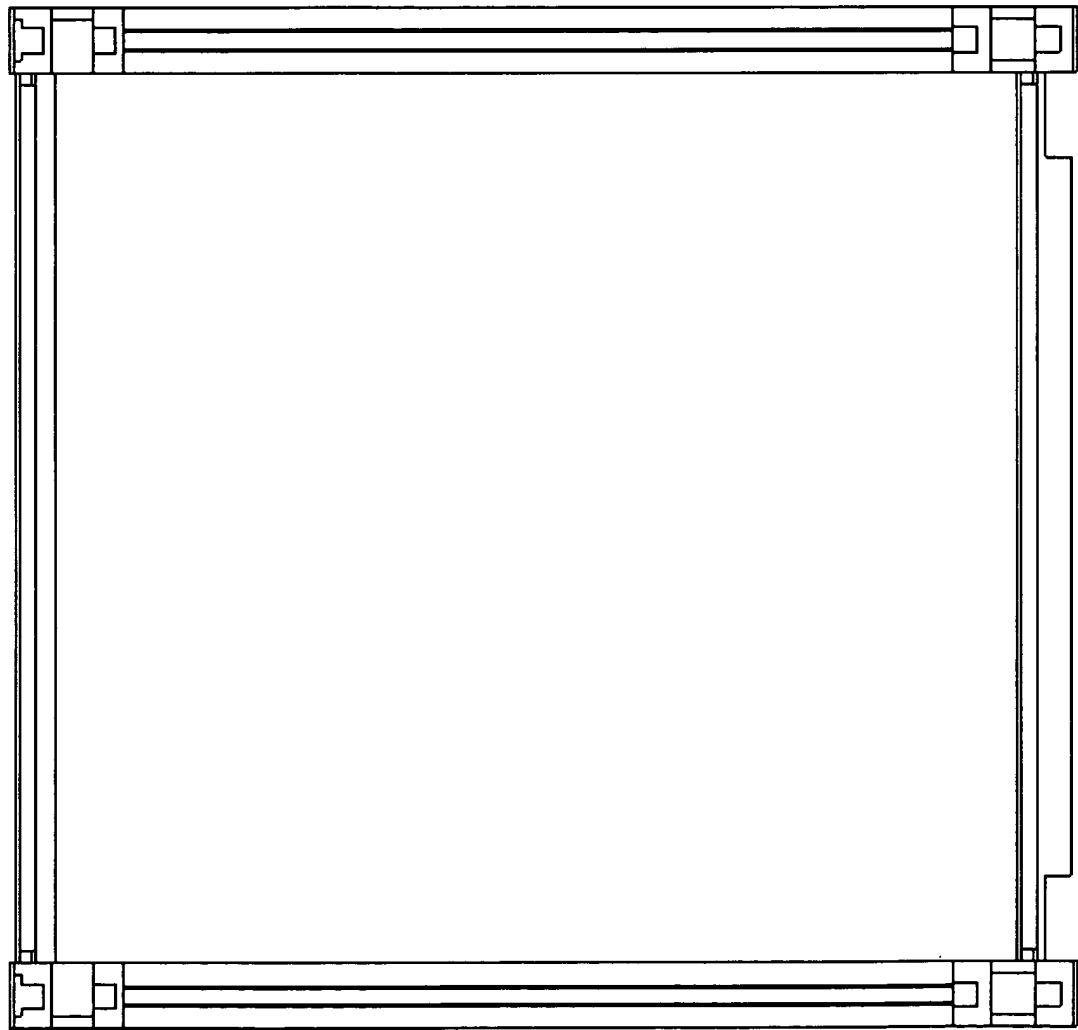


FIG. 31C: Internal view of a right frame (20 foot collapsible cargo container)

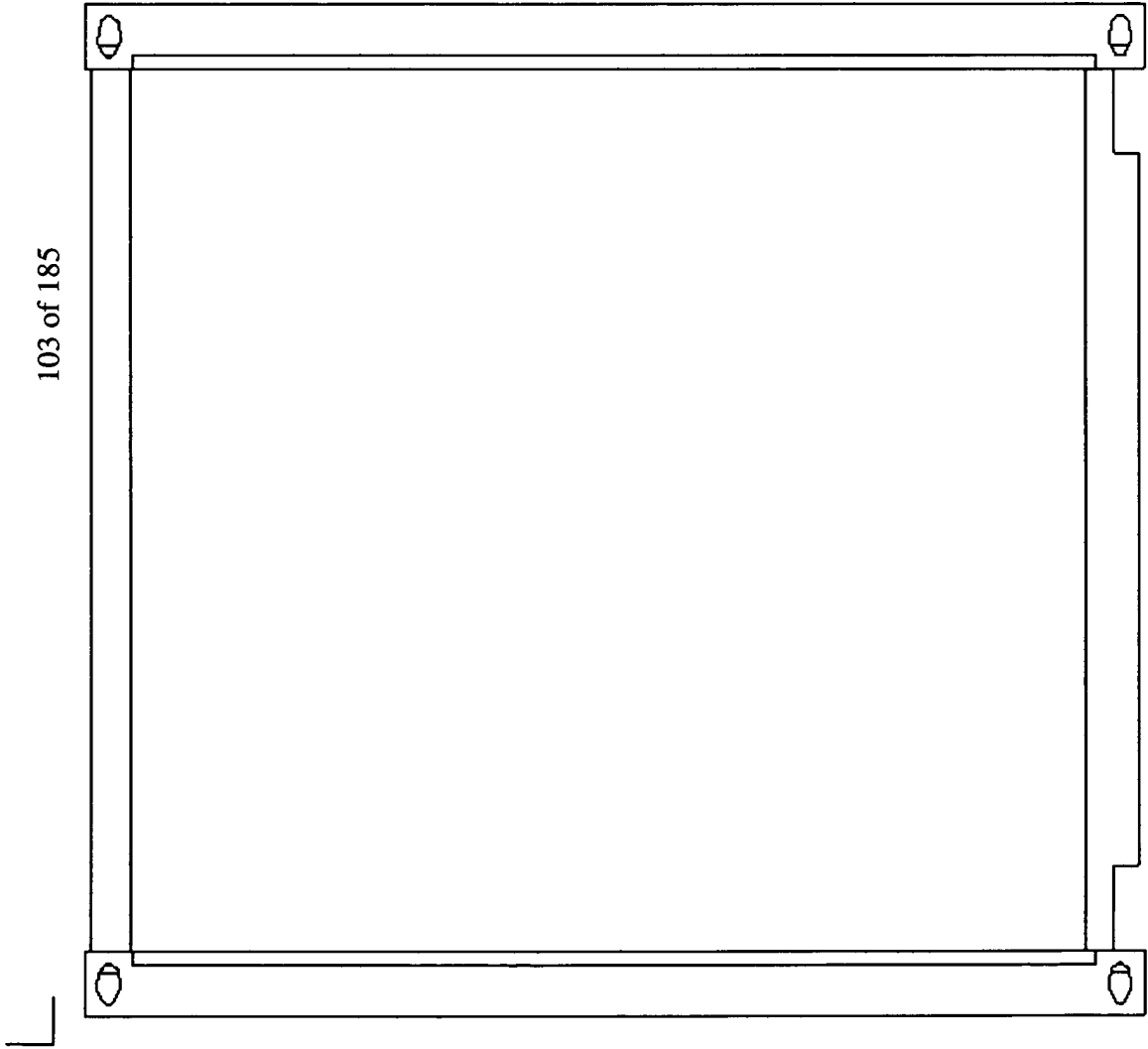


FIG. 32C: External view of a right frame (20 foot collapsible cargo container)

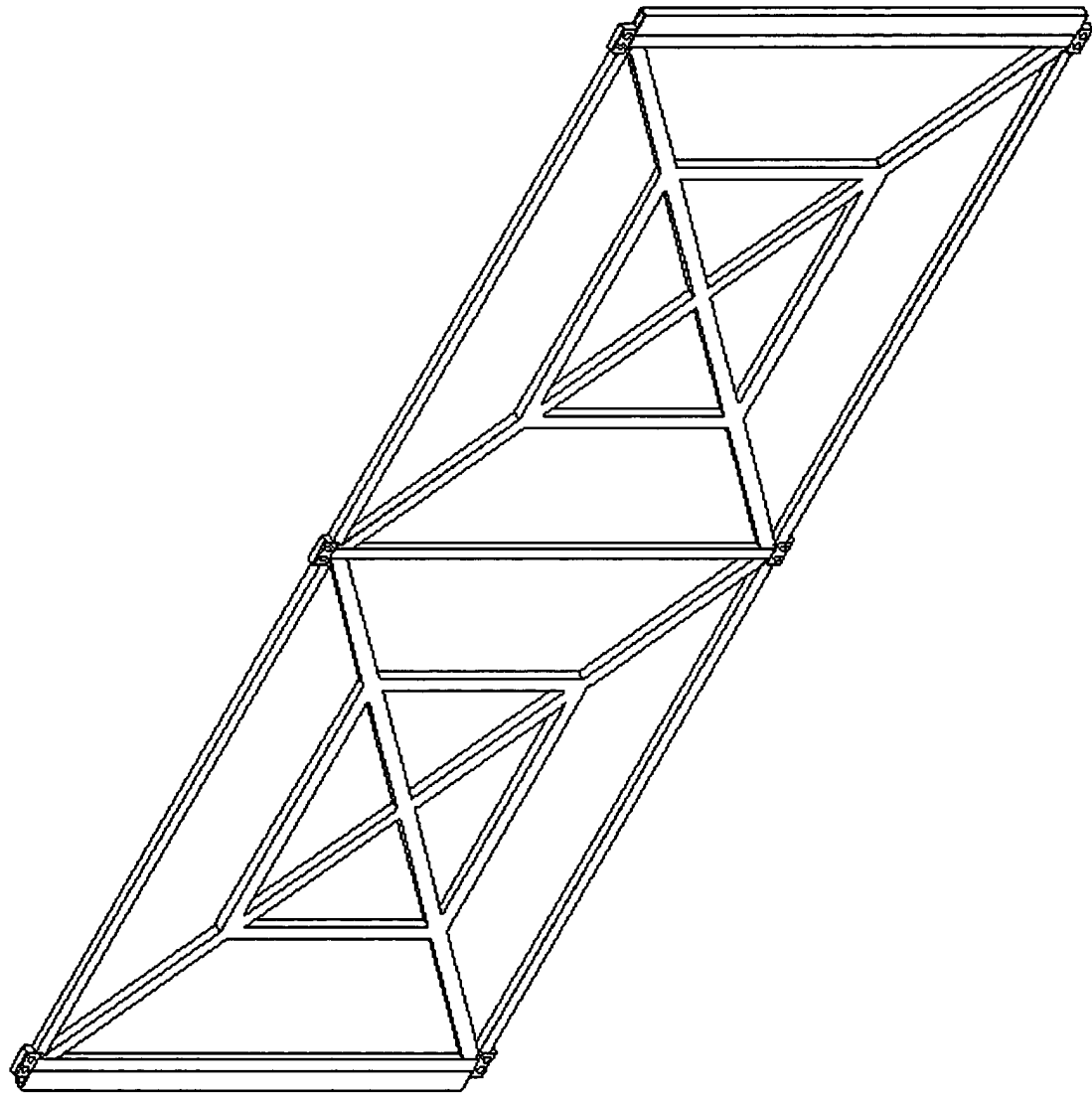


FIG. 33C/D: Isometric view of the front/back frame (20 foot and 20 foot high cube collapsible cargo containers)

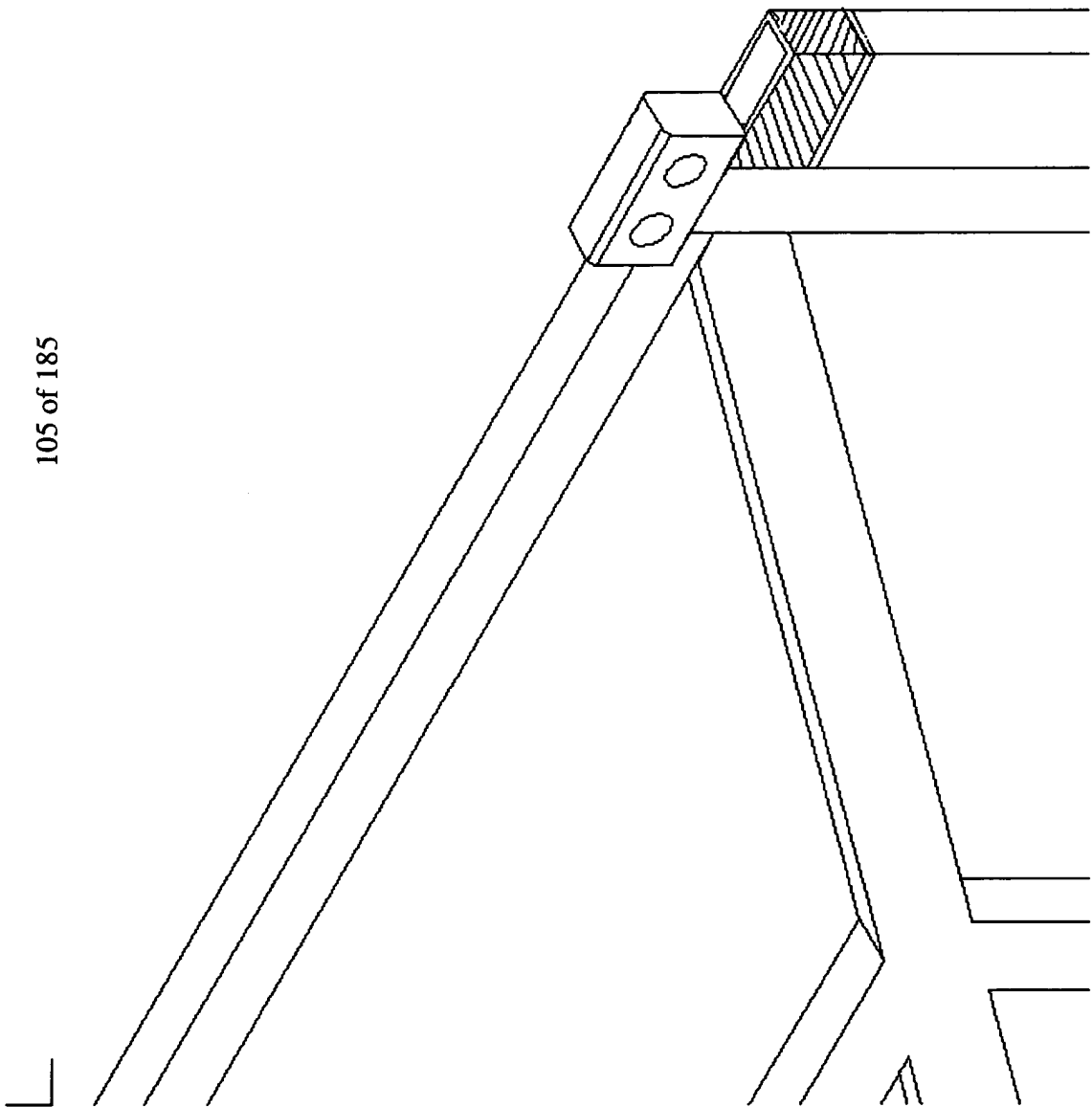


FIG. 34C/D: Isometric view of the top corner of a front/back frame (20 foot and 20 foot high cube collapsible cargo containers)



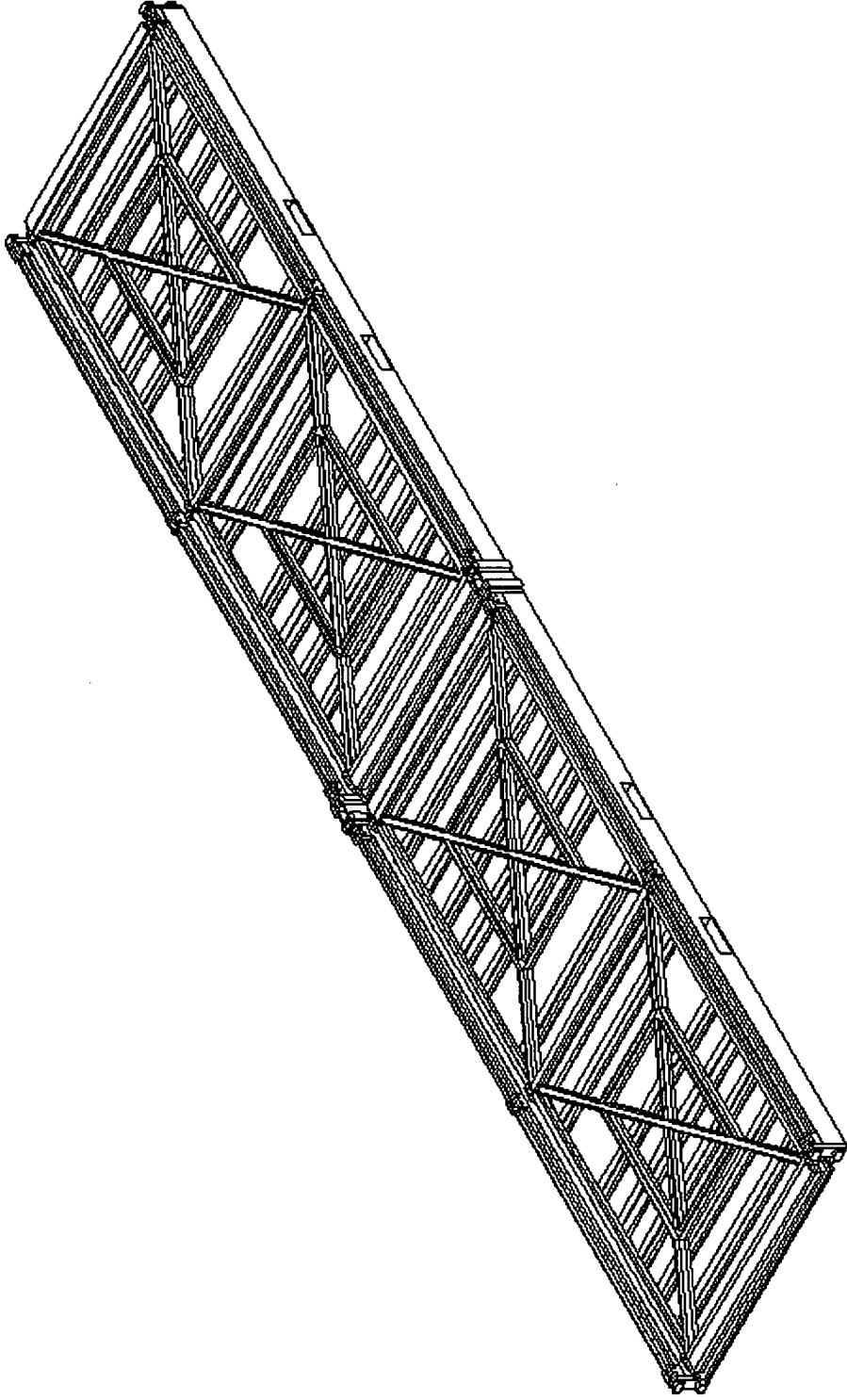


FIG. 35C: Isometric view of connected floor frame that contains two front frames and two back frames (20 foot collapsible cargo container)

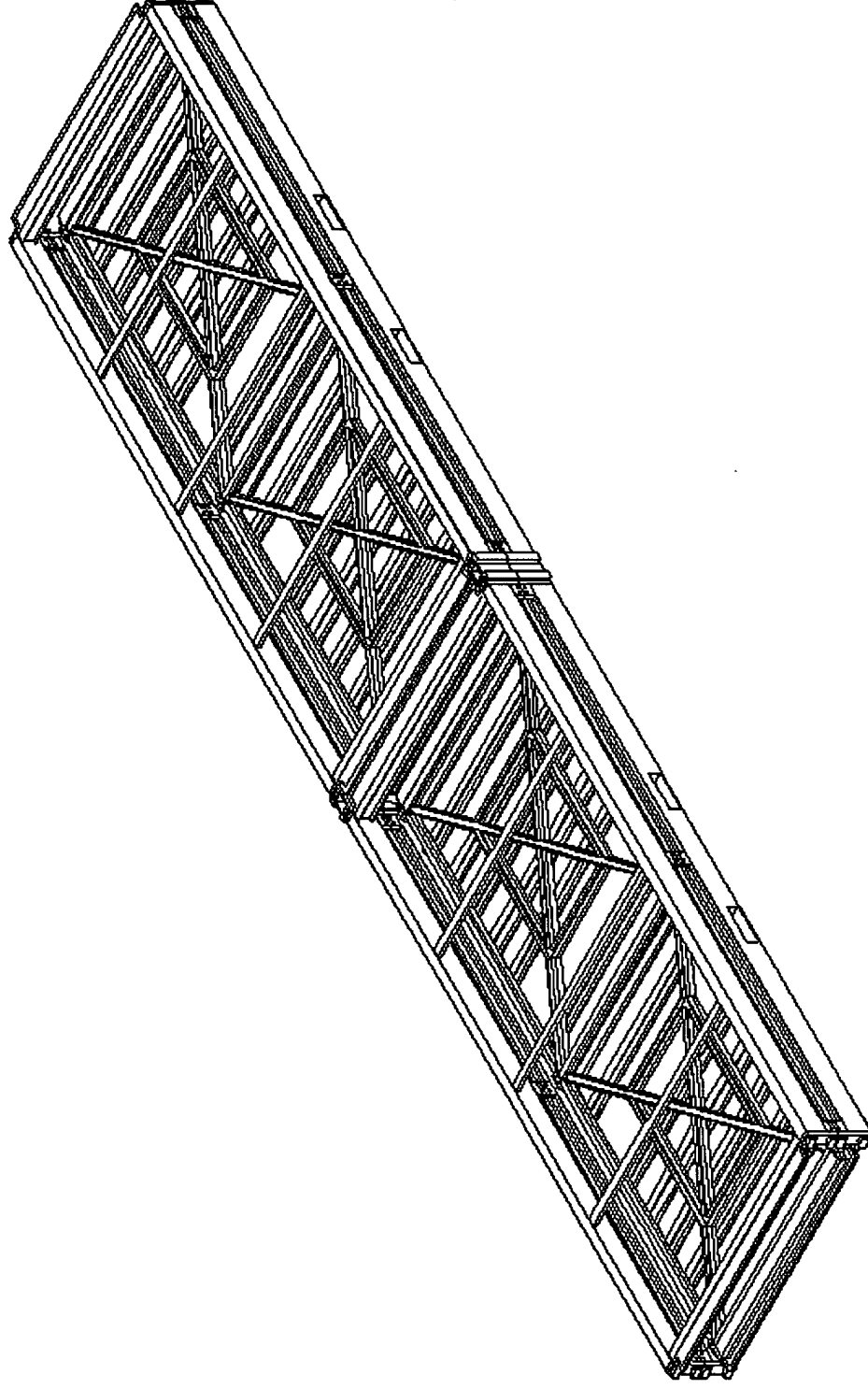


FIG. 36C: Isometric view of connected ceiling frames stacked on top of connected floor frames. Each connected floor frame contains two front frames and two back frames (20 foot collapsible cargo container). This assembly is now referred as “collapsible cargo container frame panel assembly”.

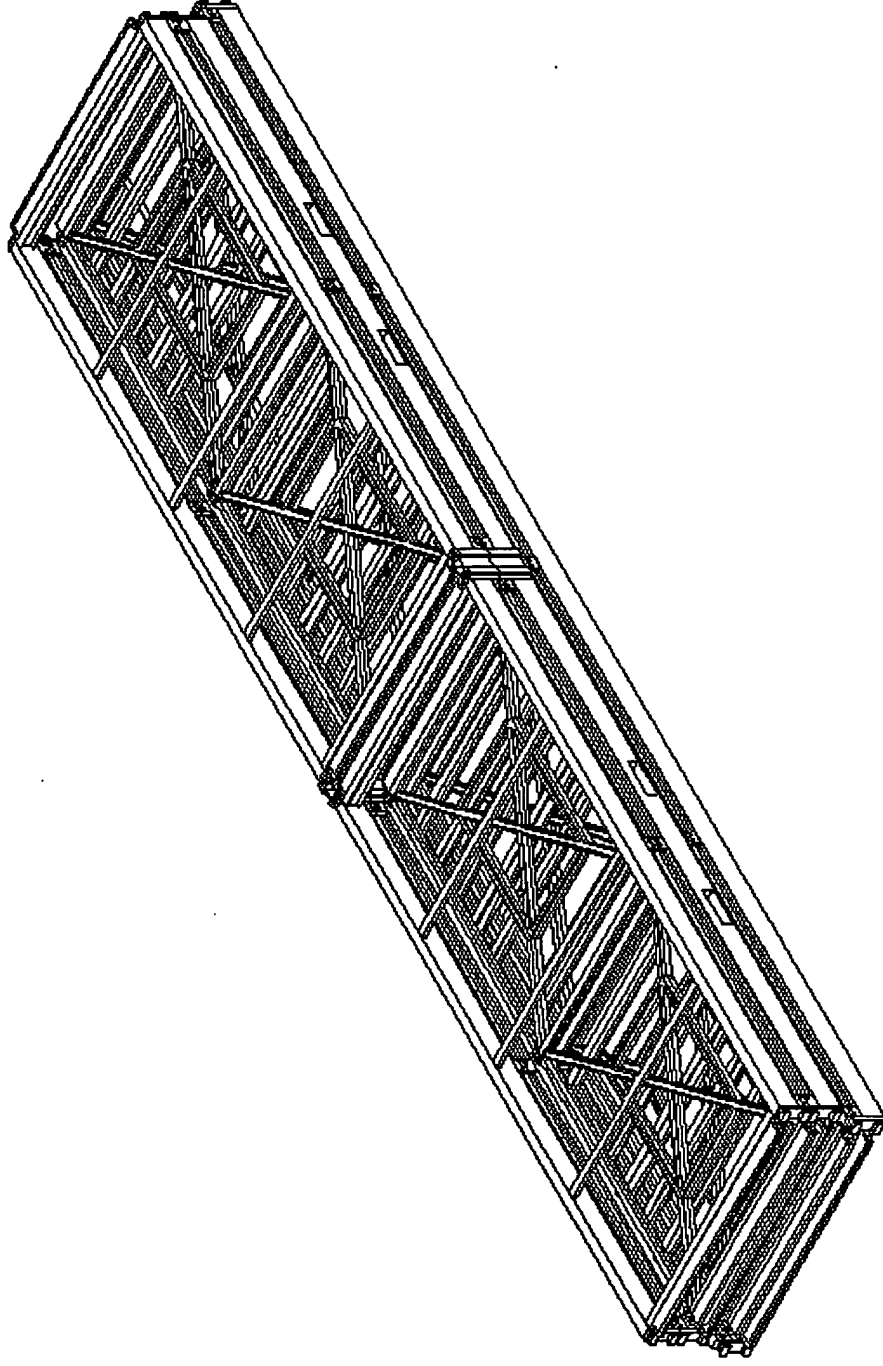


FIG. 41C: Step2 of disassemble and load process: The first "collapsible cargo container frame panel assembly" is stacked on top of previous assembly shown in FIG.39A/C/D

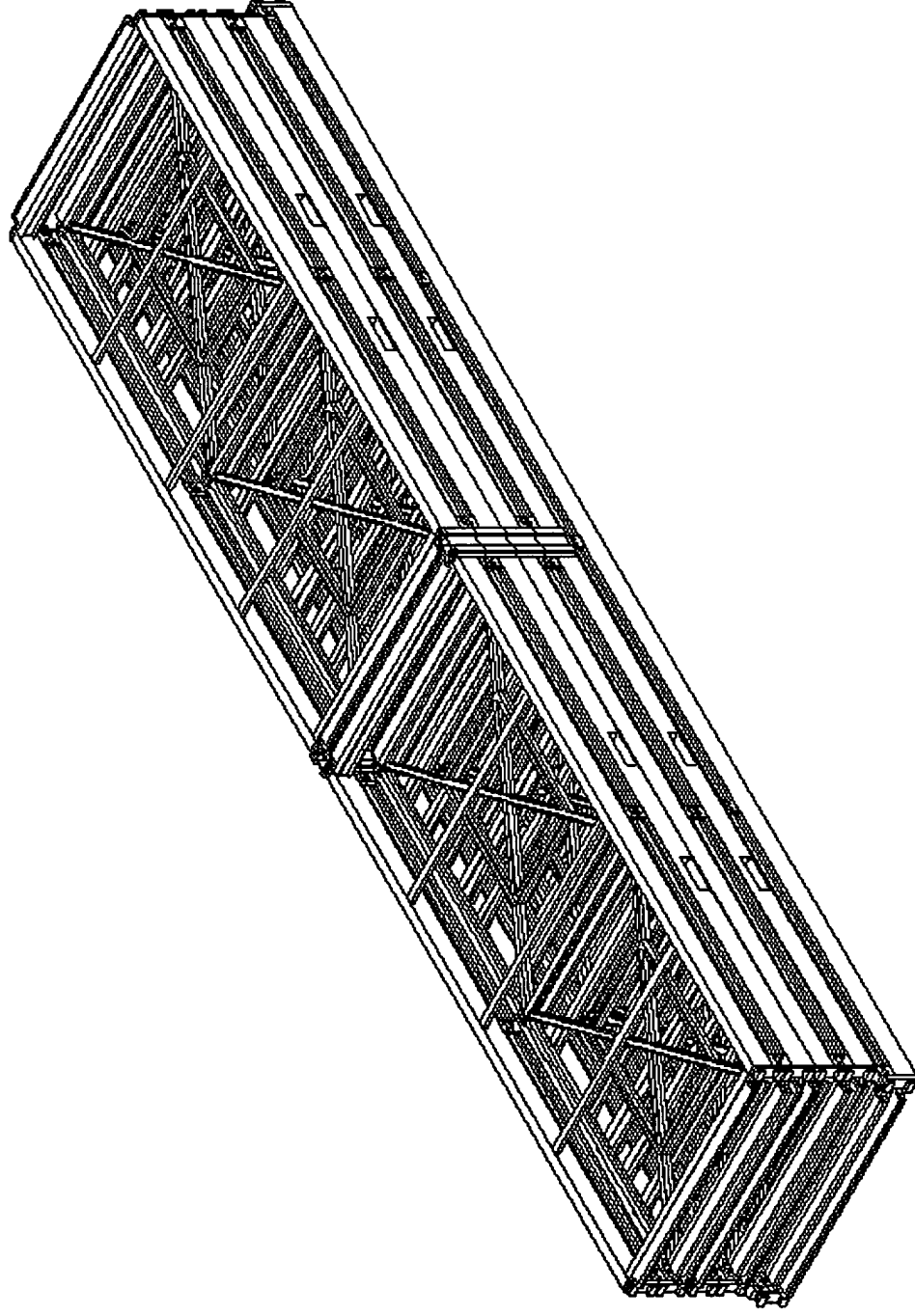


FIG. 42C: Step3 of disassemble and load process: The second "collapsible cargo container frame panel assembly" is stacked on top of previous assembly.

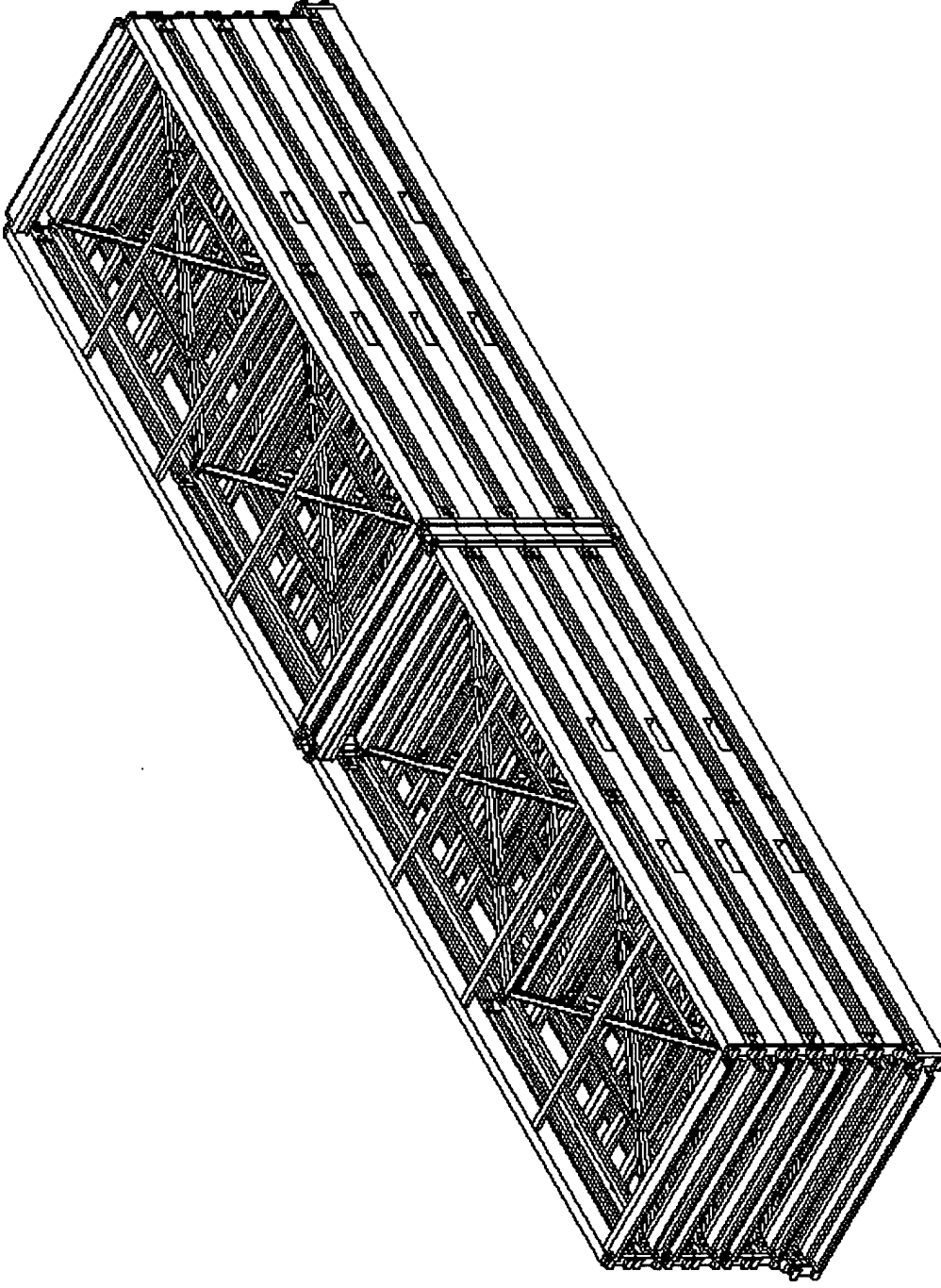


FIG. 43C: Step4 of disassemble and load process: The third "collapsible cargo container frame panel assembly" is stacked on top of previous assembly.

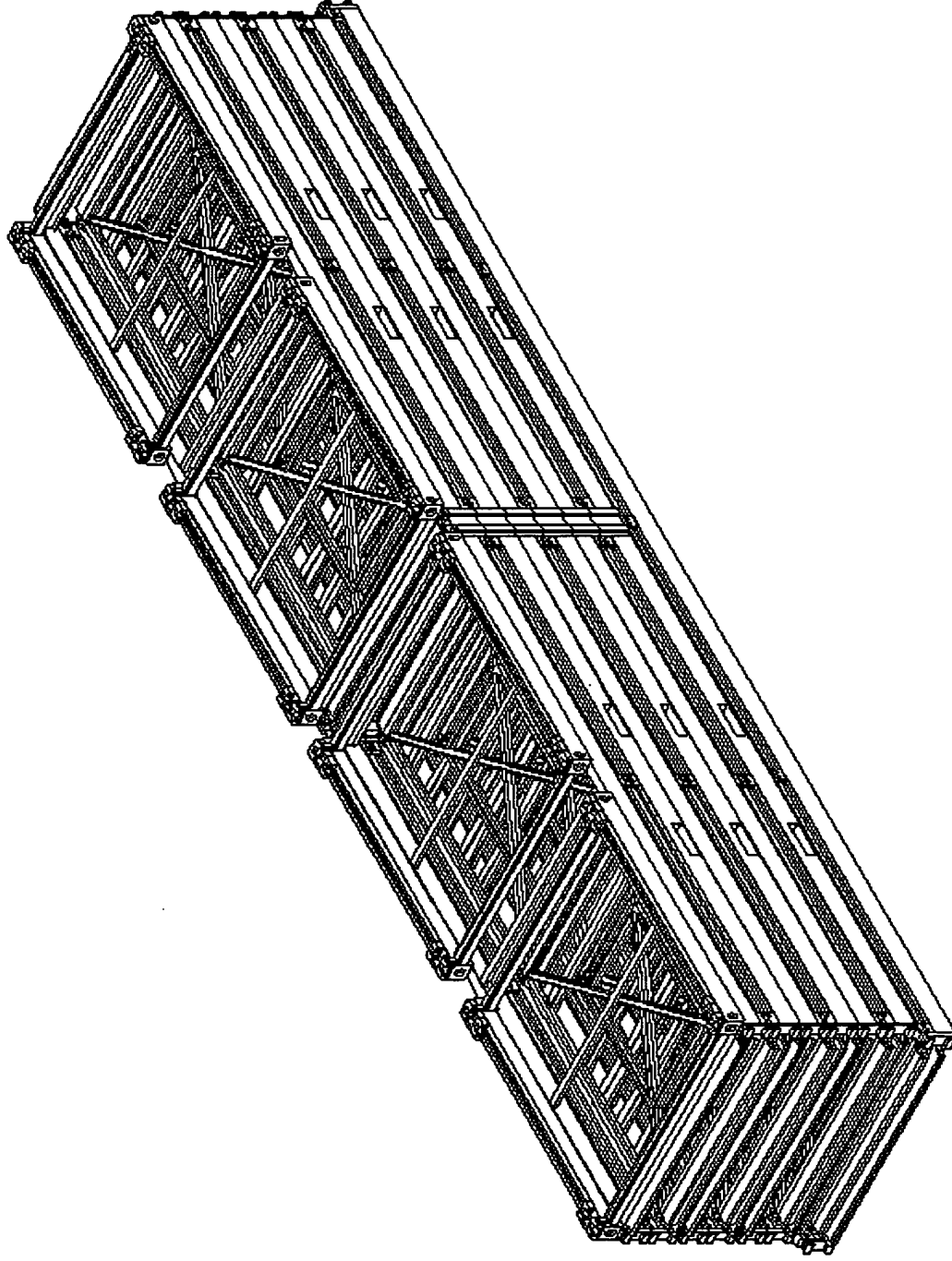


FIG. 44C: Step5 of disassemble and load process: The left and right frames from 2 disassembled 20 foot collapsible cargo containers are stacked on top of the previous assembly.

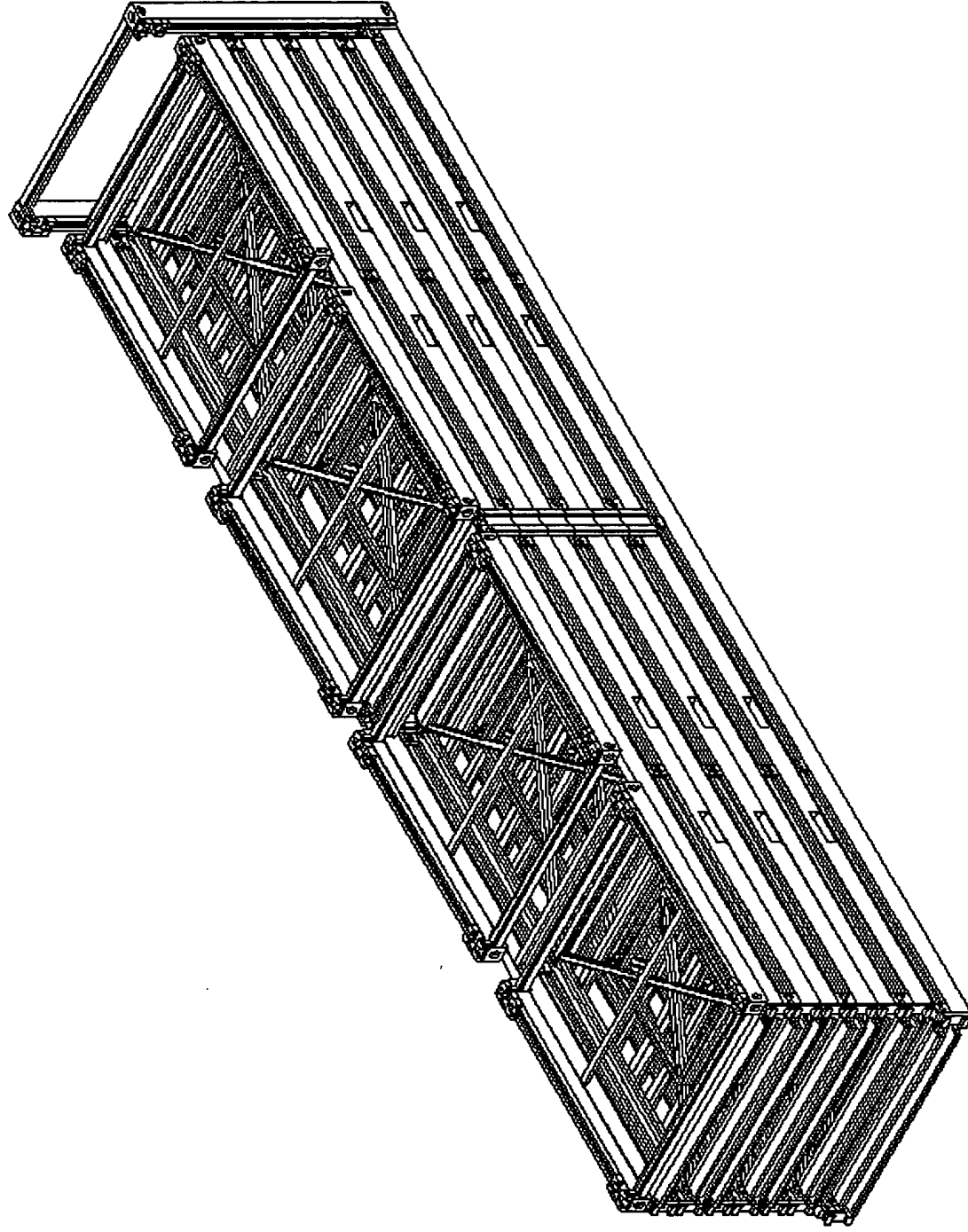


FIG. 45C: Step6 of disassemble and load process: The left frame of the 40 foot shipping collapsible cargo container is assembled.

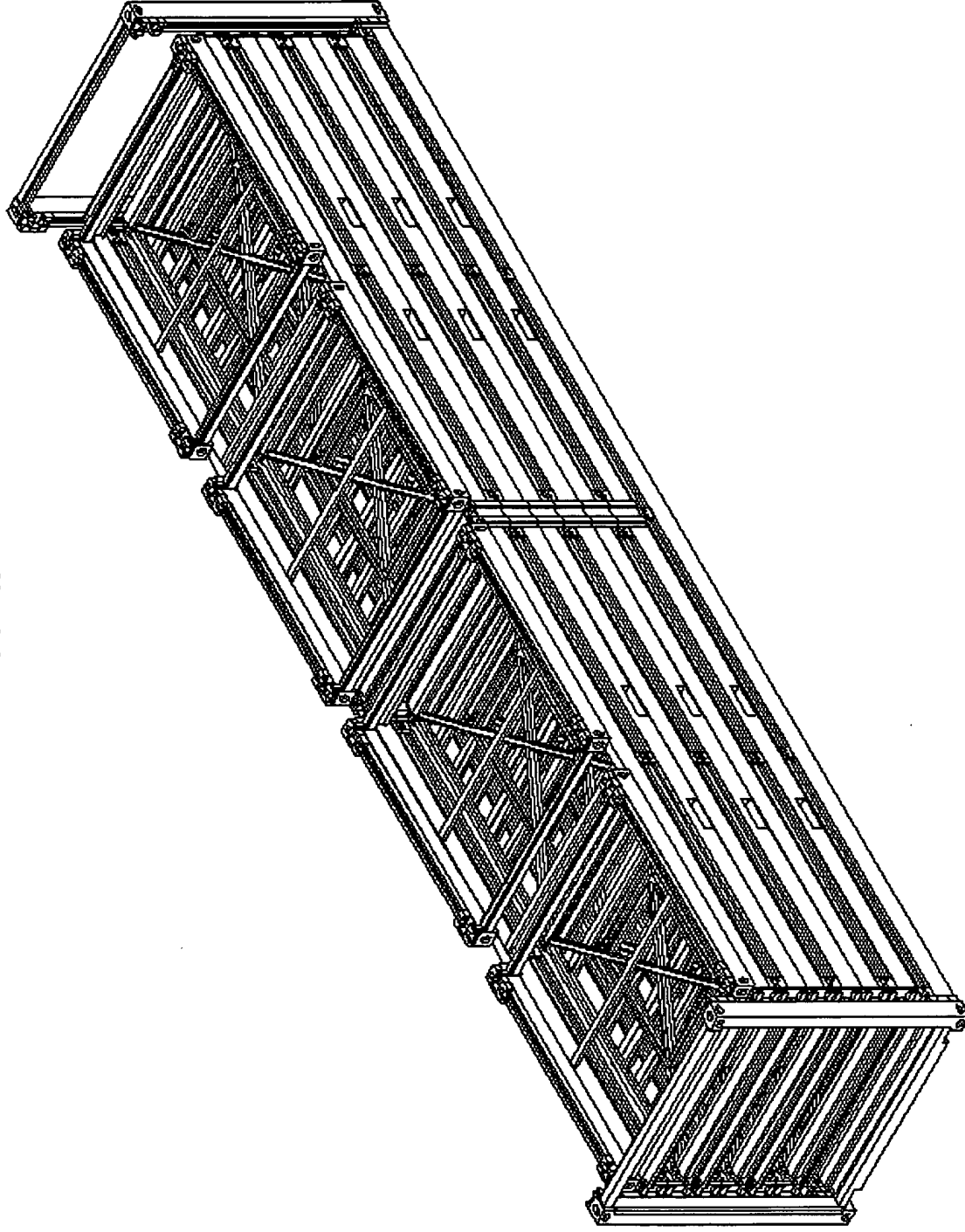


FIG. 46C: Step7 of disassemble and load process: The right frame of the 40 foot shipping collapsible cargo container is assembled.

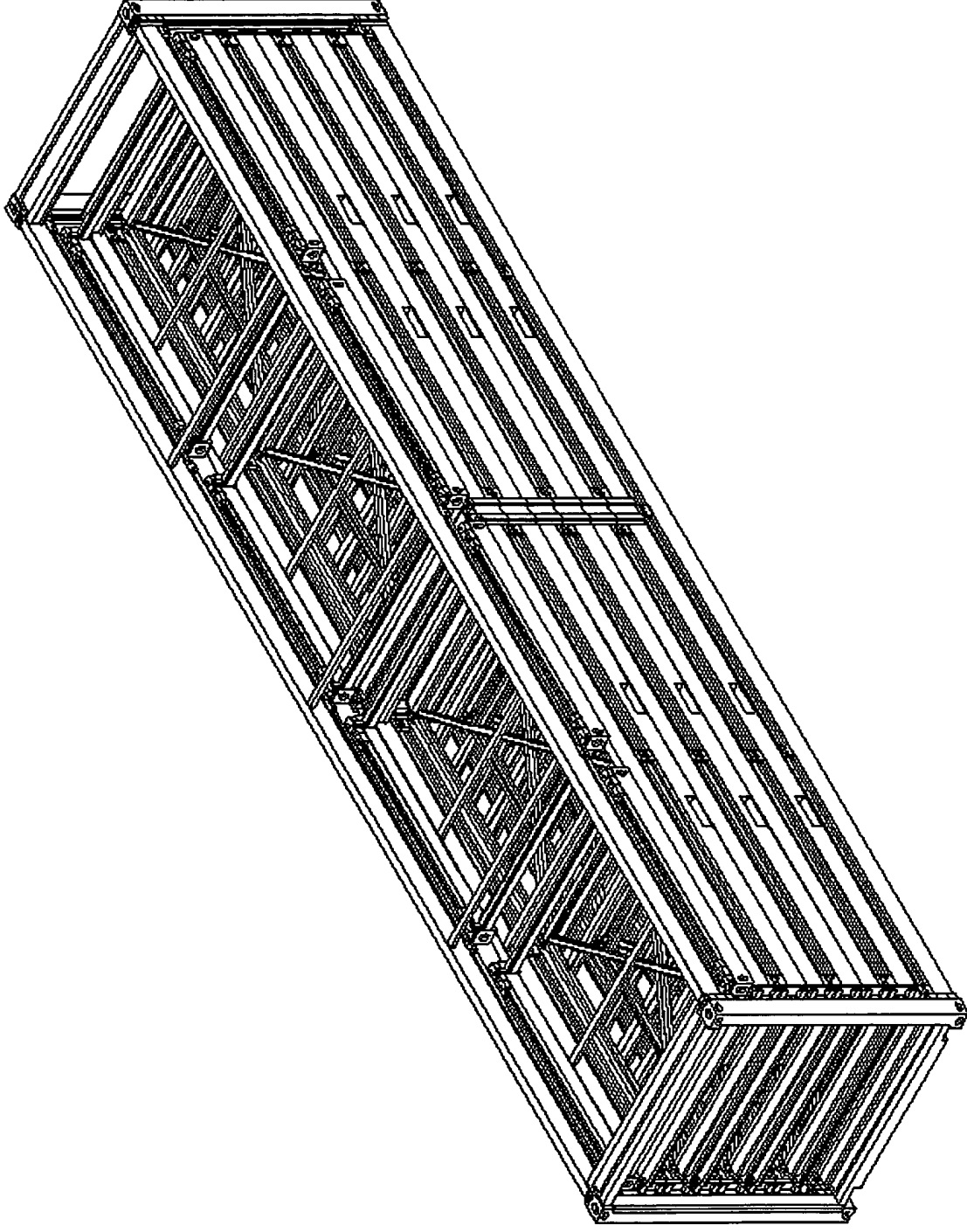


FIG. 47C: Step8 of disassemble and load process: The ceiling frame of the 40 foot shipping collapsible cargo container is assembled.

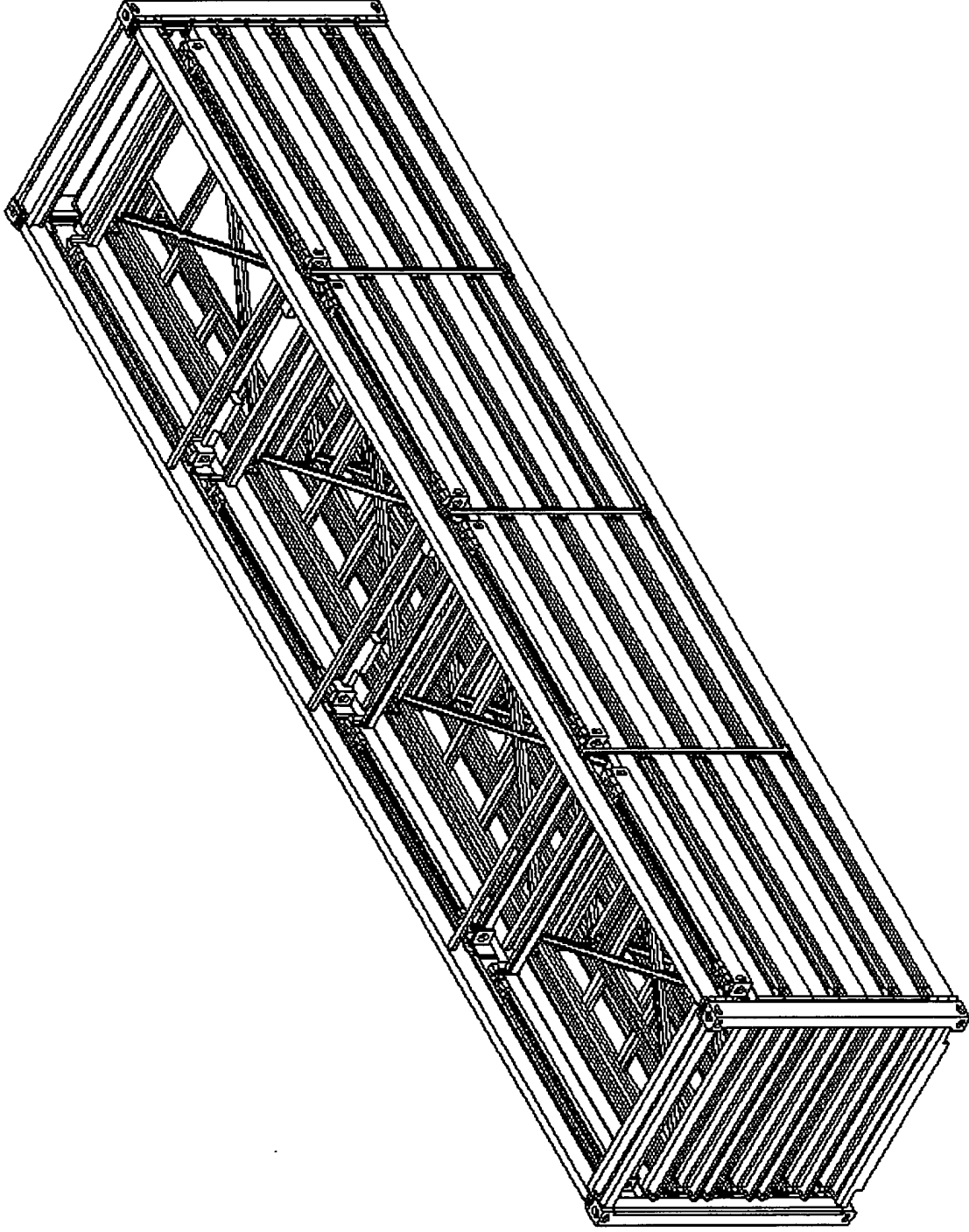


FIG. 48C: Step9 of disassemble and load process: The six vertical beams are assembled.

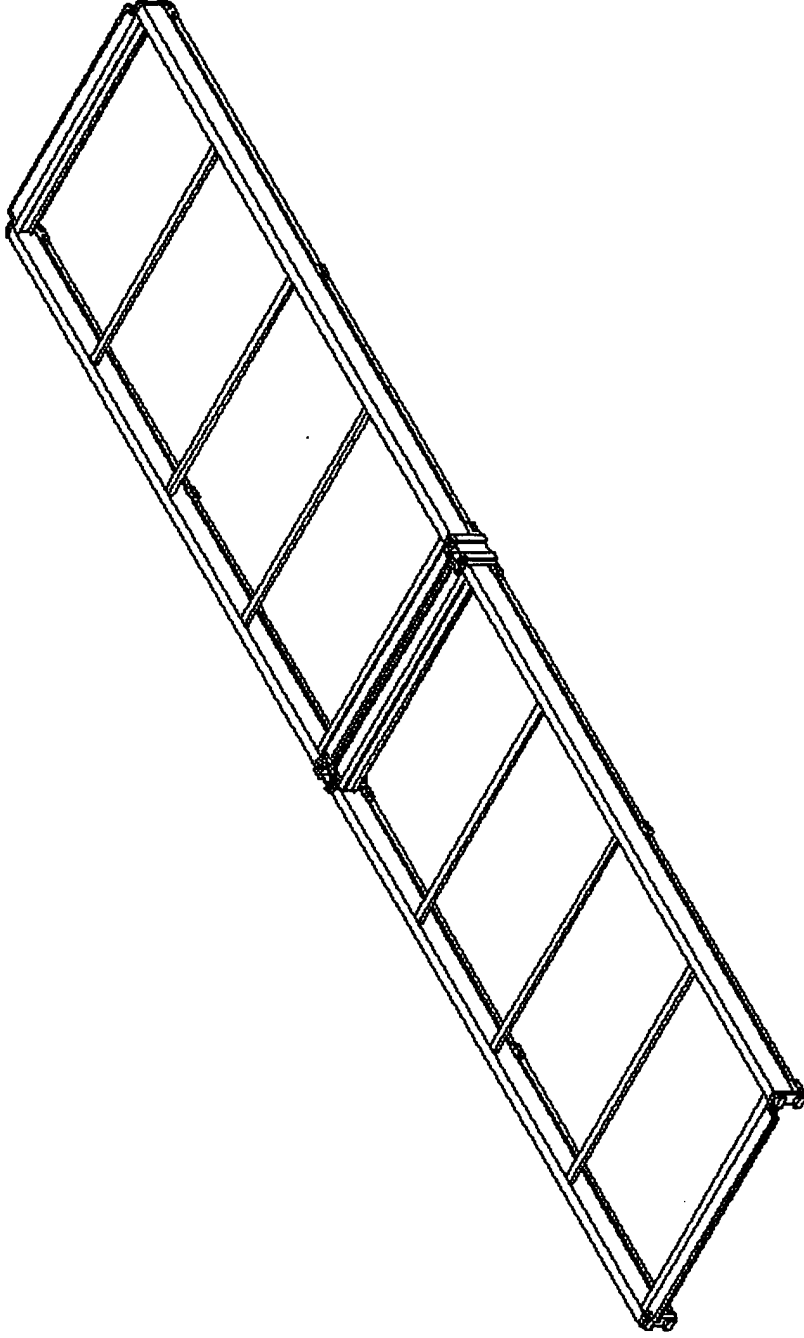


FIG. 49C: Two connectors connect two ceiling frame panels during the shipping process (20 foot collapsible cargo container).

117 of 185

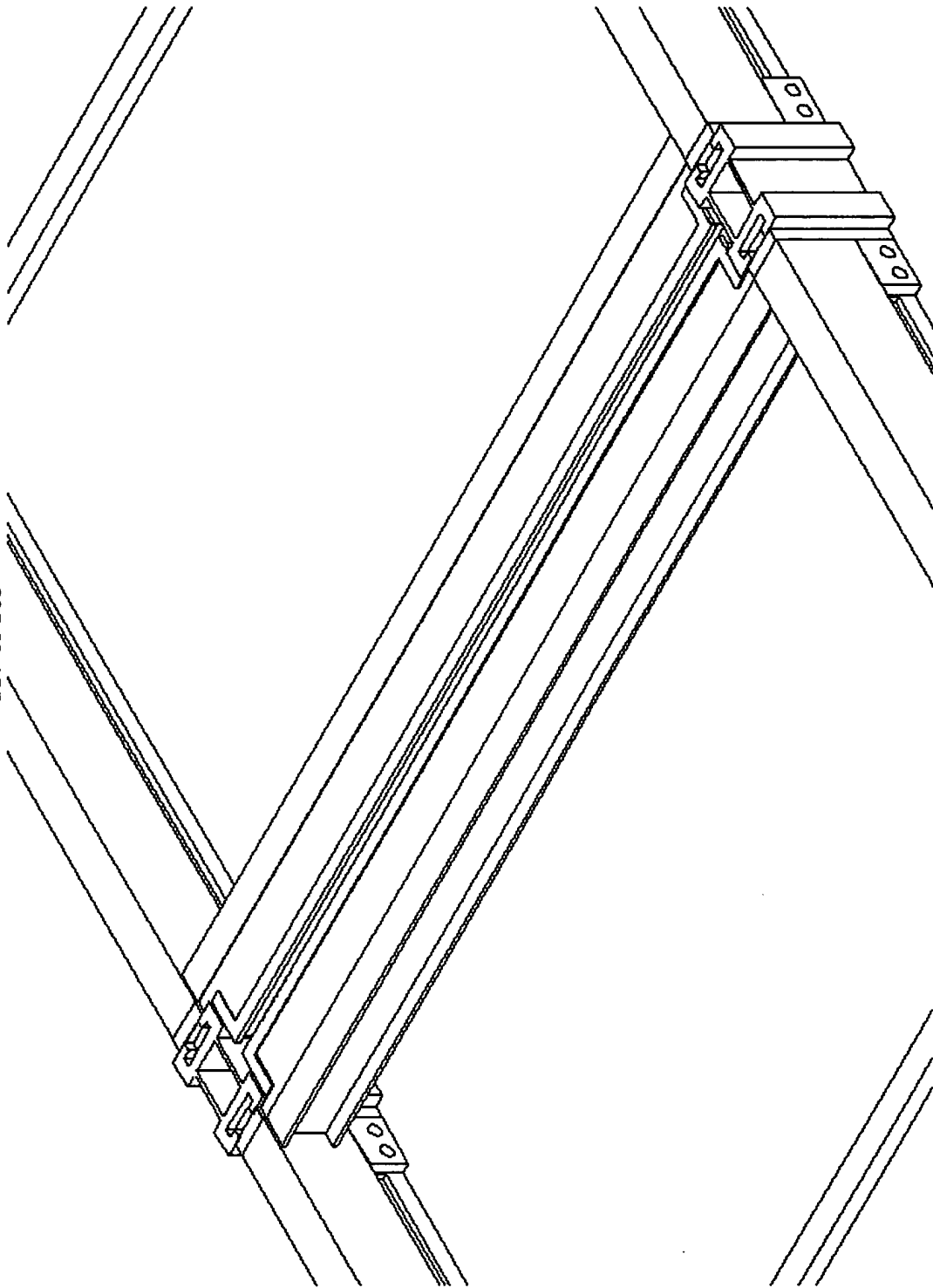


FIG. 50C: Detail view based on FIG. 49C.

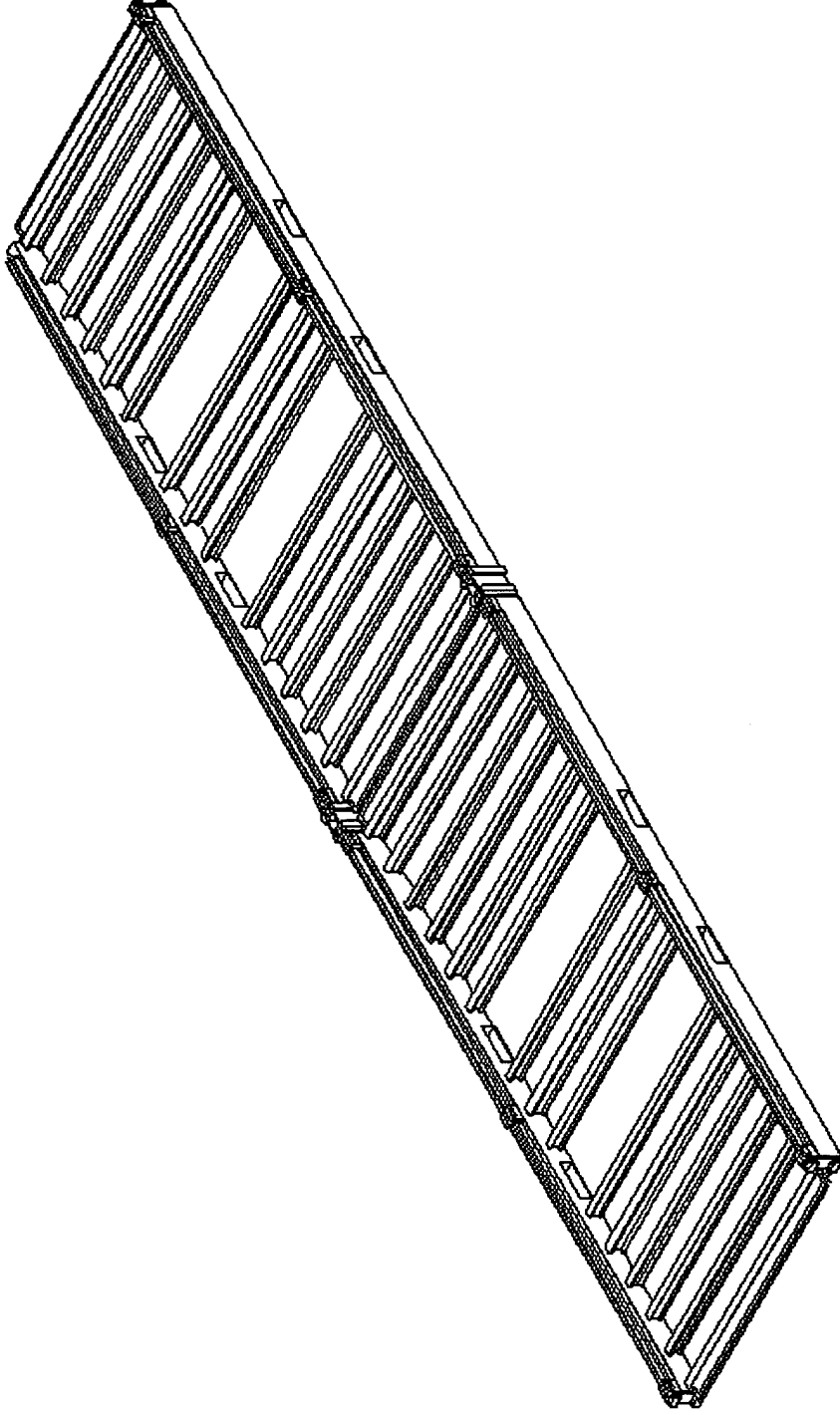


FIG. 51C: Two connectors connect two floor frame panels during the shipping process (20 foot collapsible cargo container).

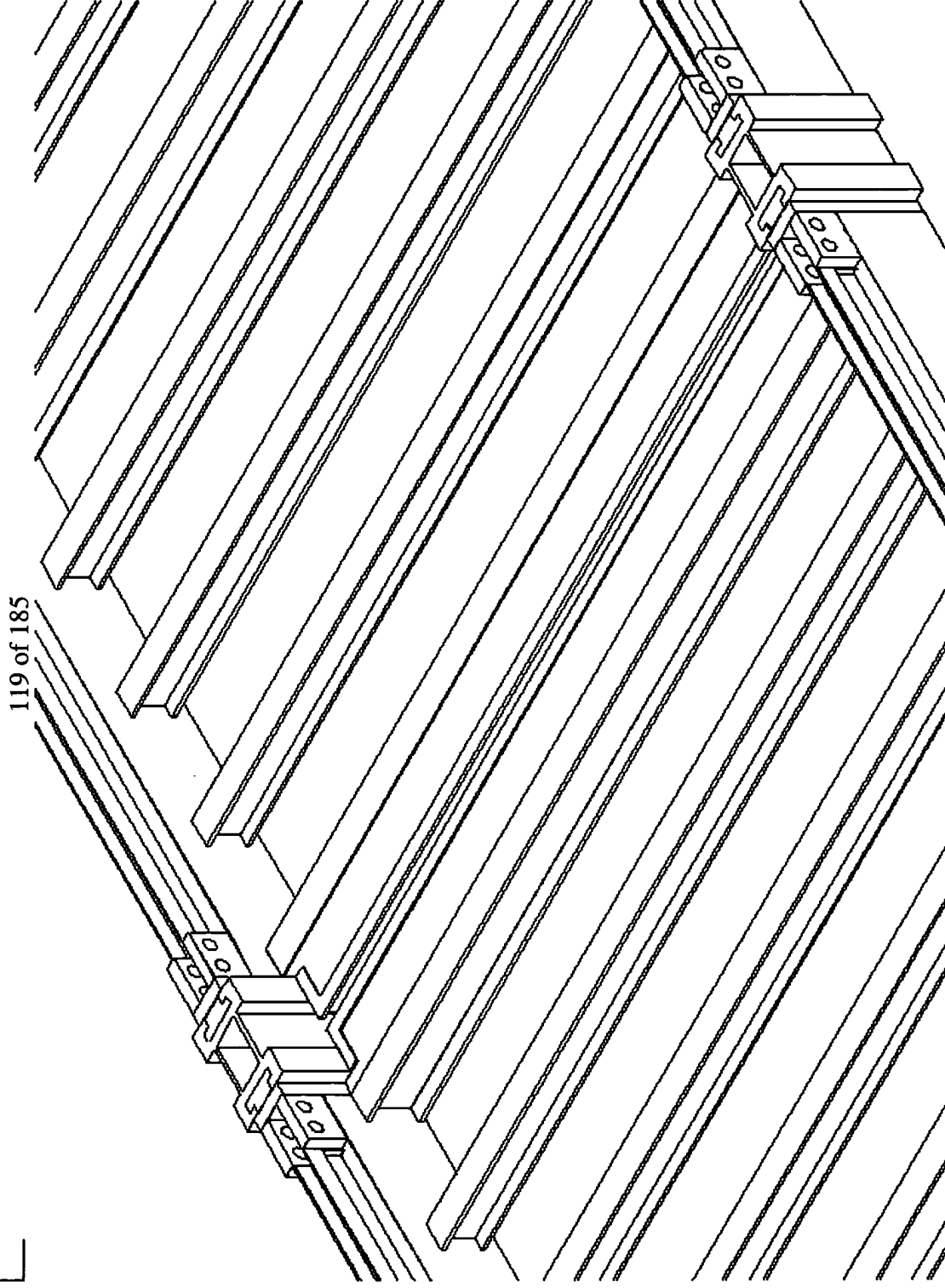


FIG. 52C: Detail view based on FIG. 51C.

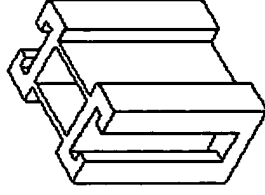
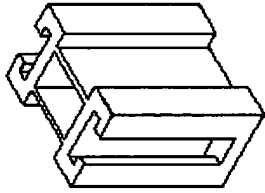


FIG. 53C: Two connectors used to connect two floor frame panels as well as two ceiling frame panels (20 foot collapsible cargo container).

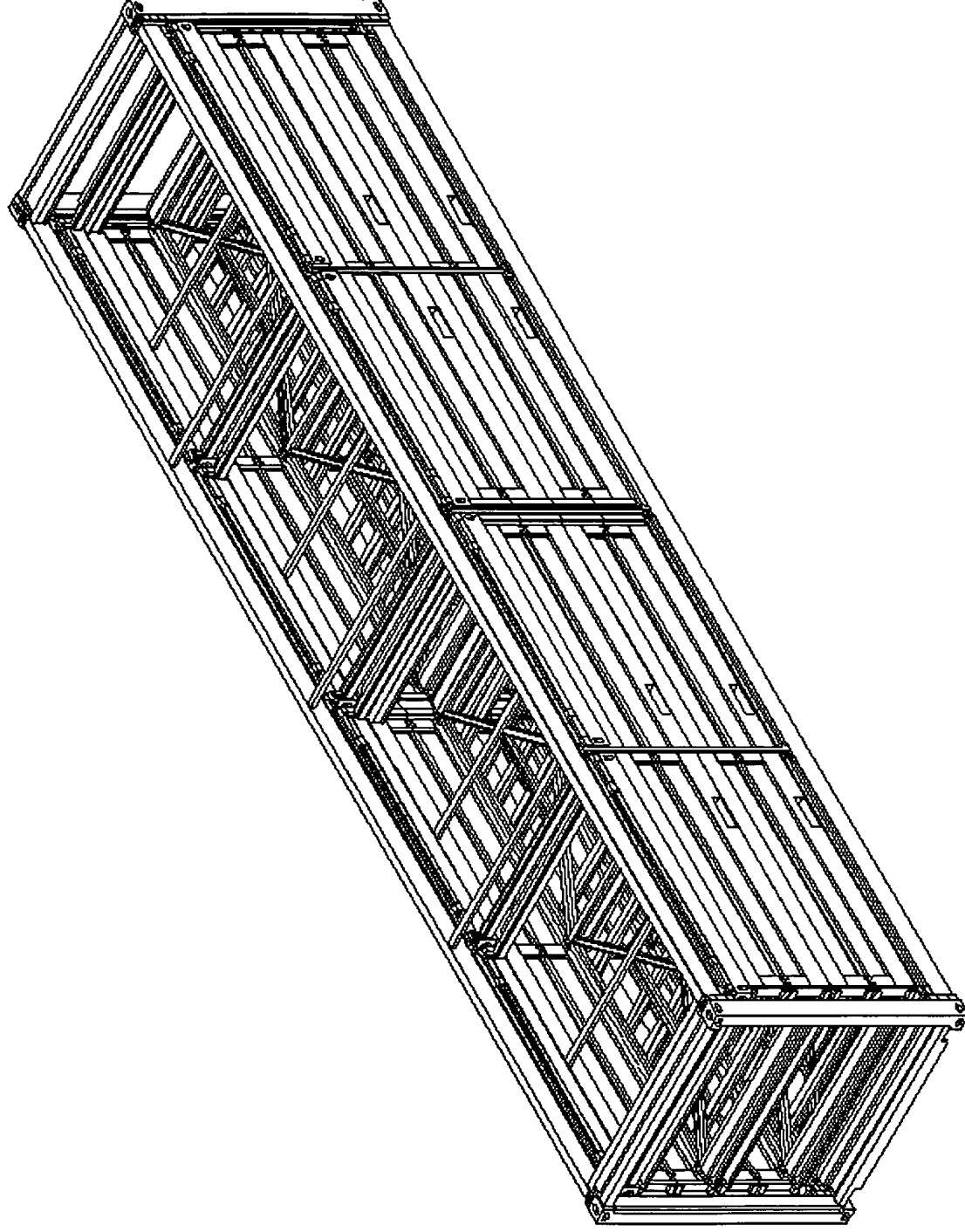
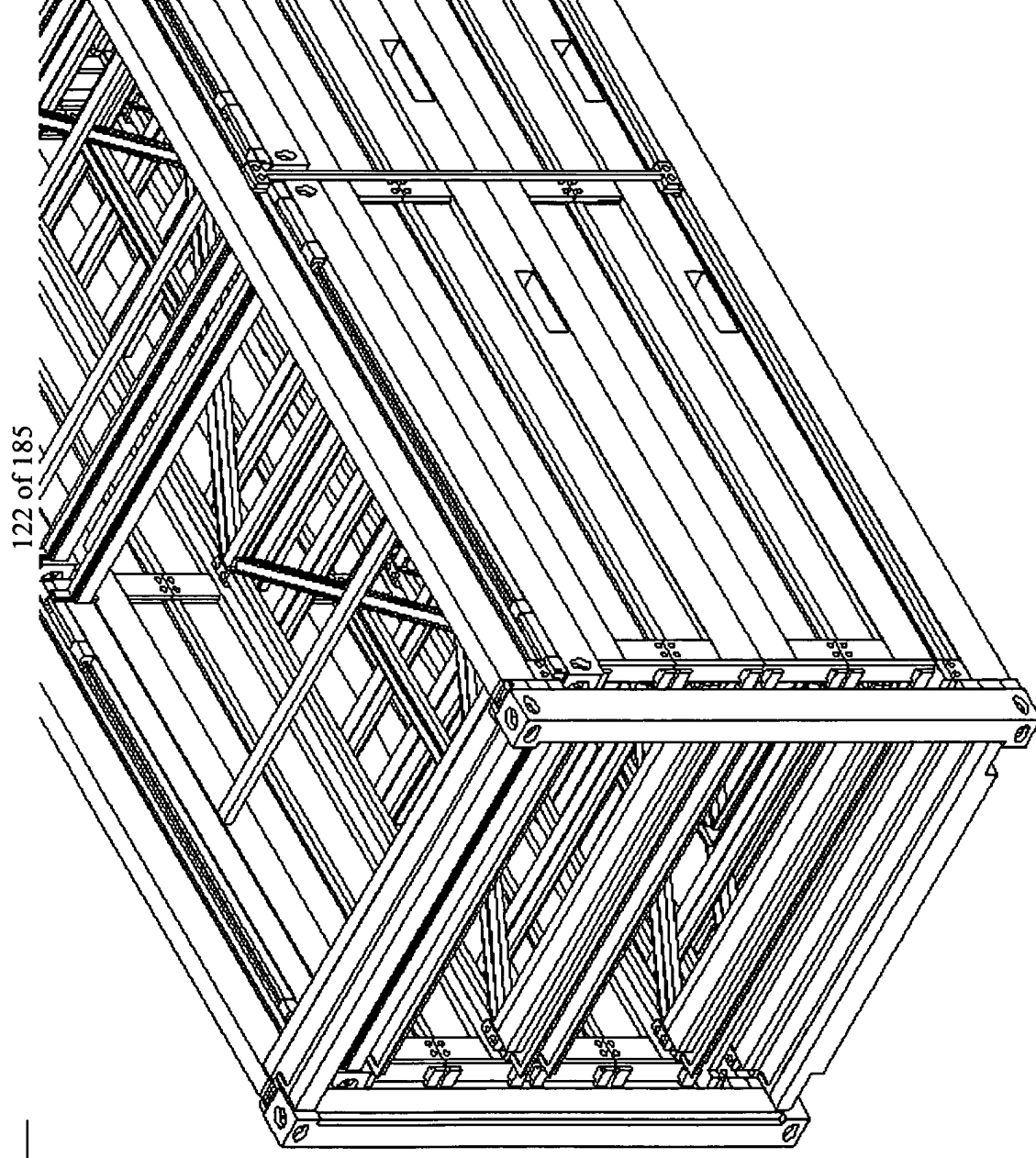


FIG. 1D: Basic isometric view of the 40 foot collapsible cargo container frame loaded with four collapsed 20 foot high cube collapsible cargo container frame panels, it is referred as “shipping collapsible cargo container”.



122 of 185

FIG. 2D: Detailed isometric view of the 40 foot collapsible cargo container frame loaded with four collapsed 20 foot high cube high cube collapsible cargo container frame panels

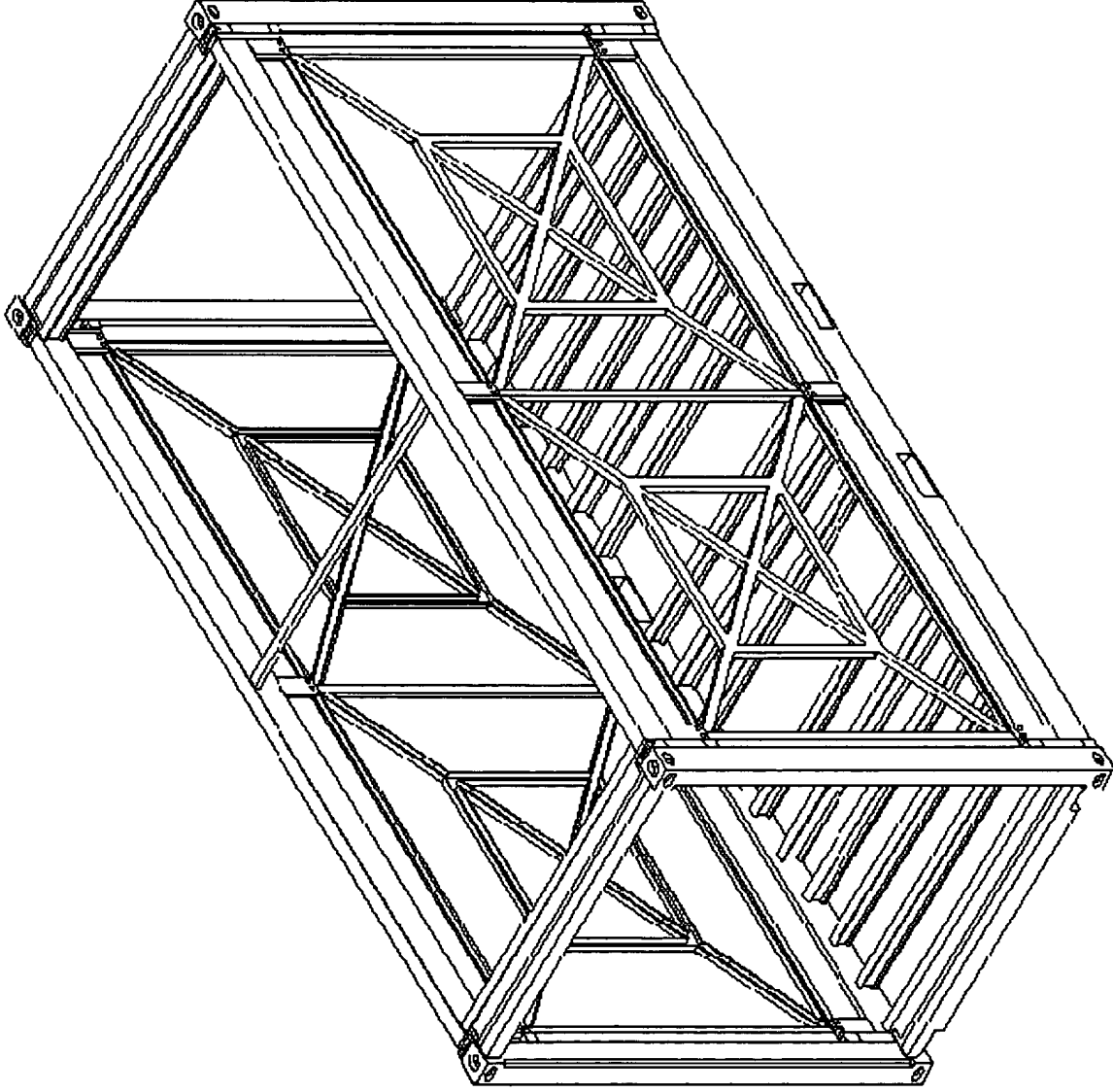


FIG. 3D: Basic isometric view of the 20 foot high cube high cube collapsible cargo container frame

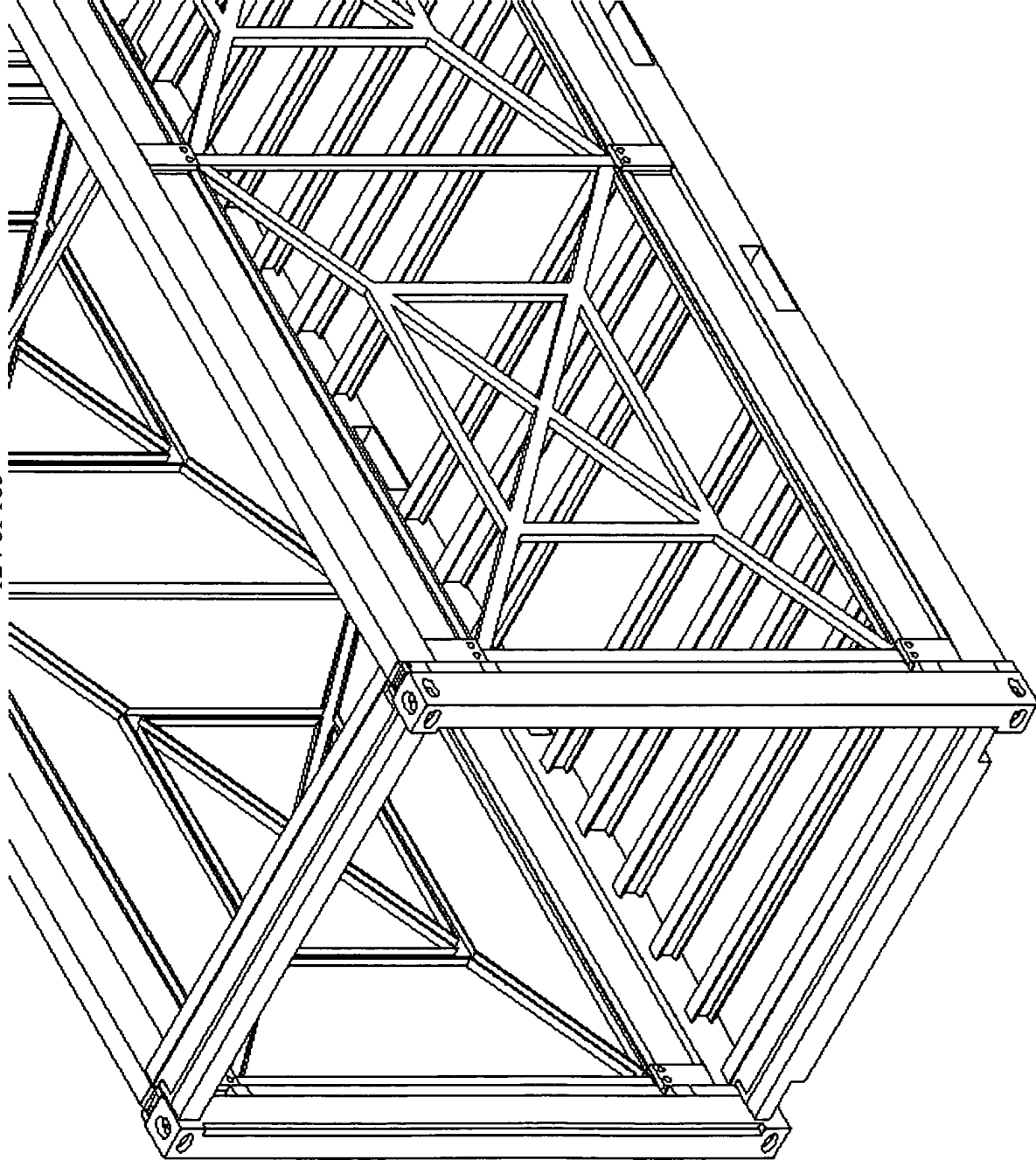


FIG. 4D: Enlarged isometric view of the right end of a 20 foot high cube collapsible cargo container

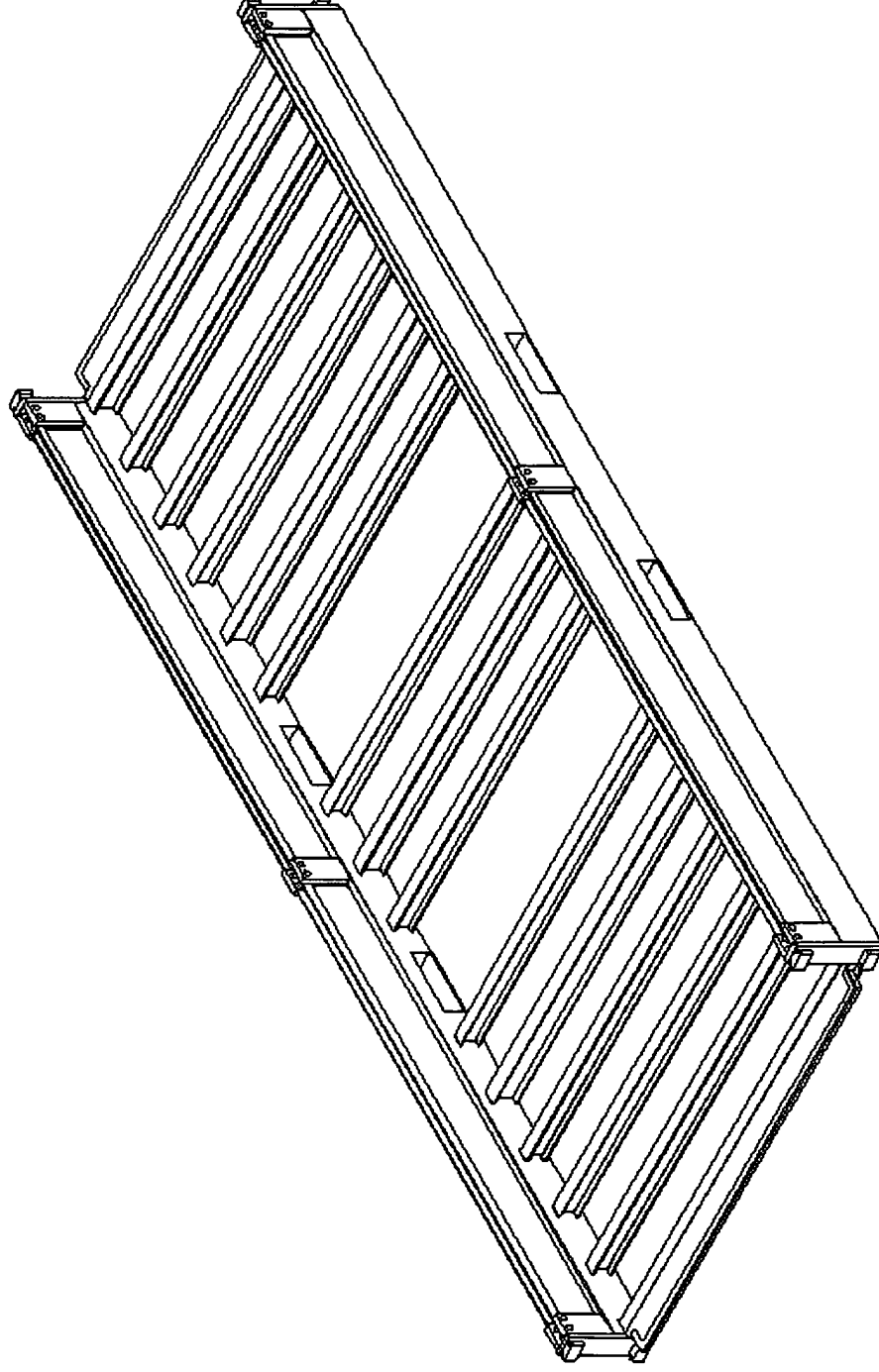


FIG. 6D: Basic isometric view of the floor frame (20 foot high cube collapsible cargo container)

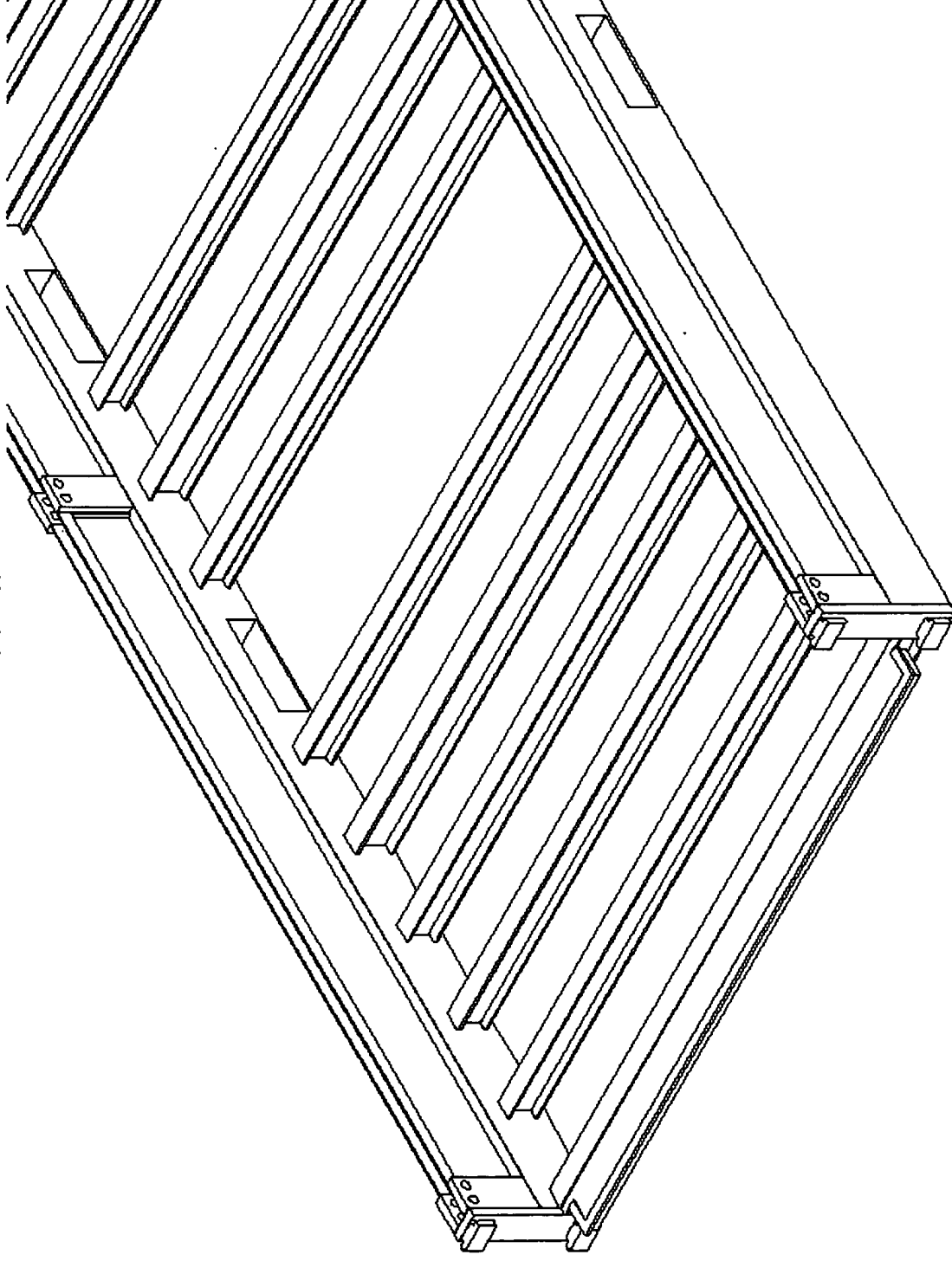


FIG. 12D: Isometric view of the right end of a floor frame (20 foot high cube collapsible cargo container)

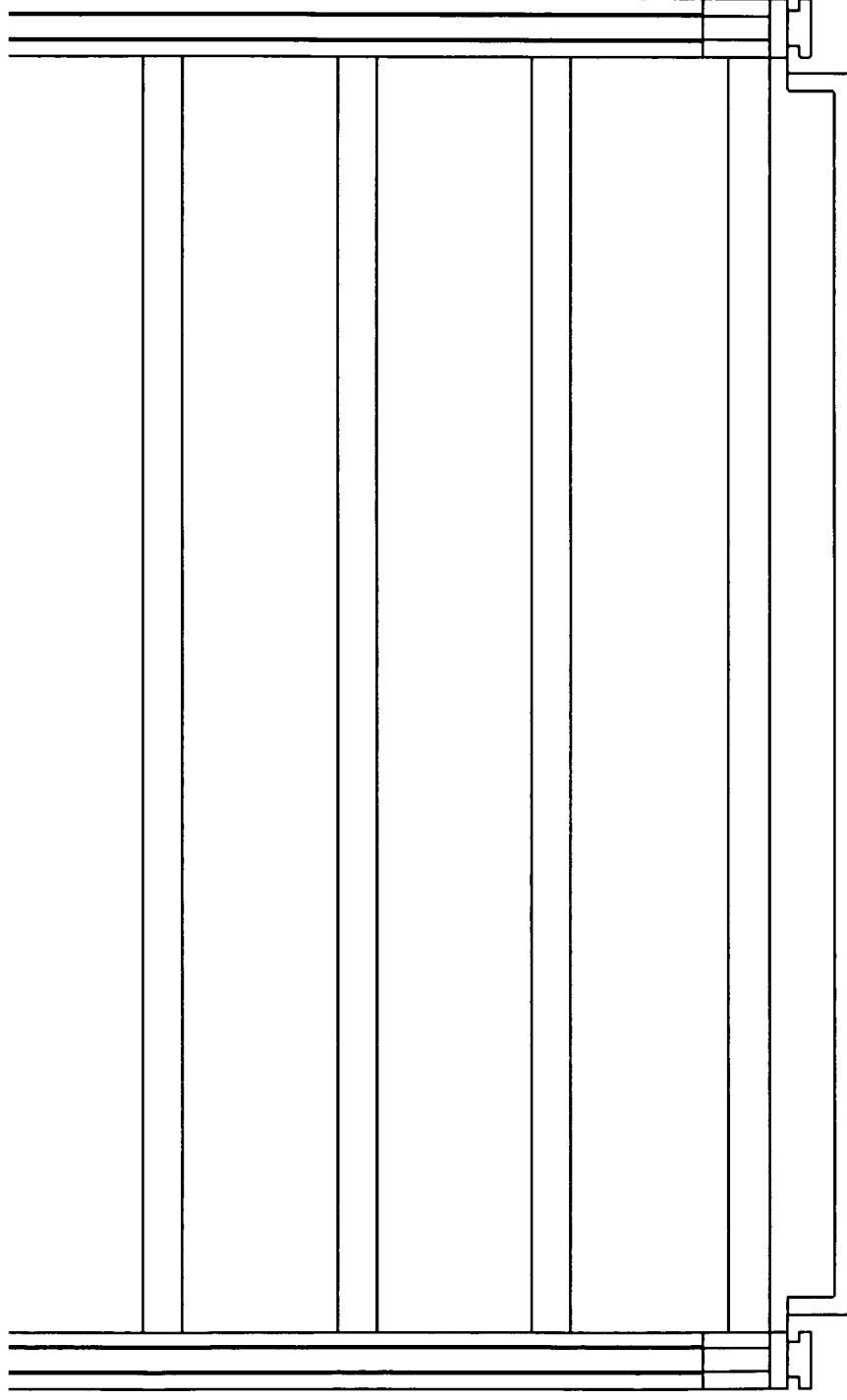


FIG. 13D: Top view of the right end of a floor frame (20 foot high cube collapsible cargo container)

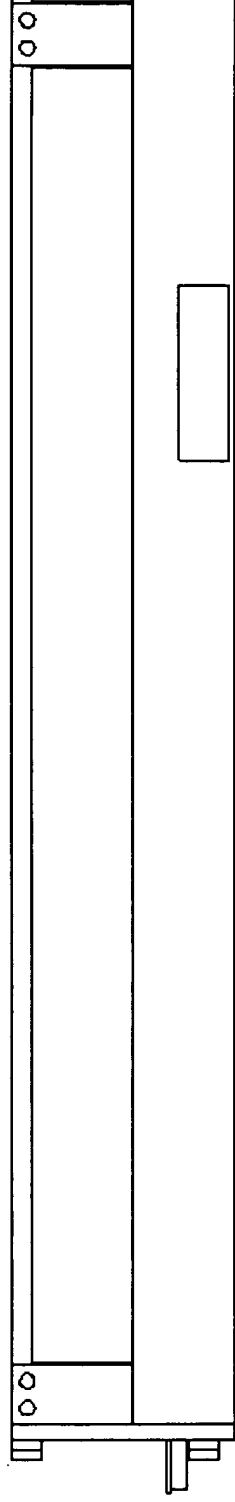


FIG. 14D: Front view of the right end of a floor frame (20 foot high cube collapsible cargo container)

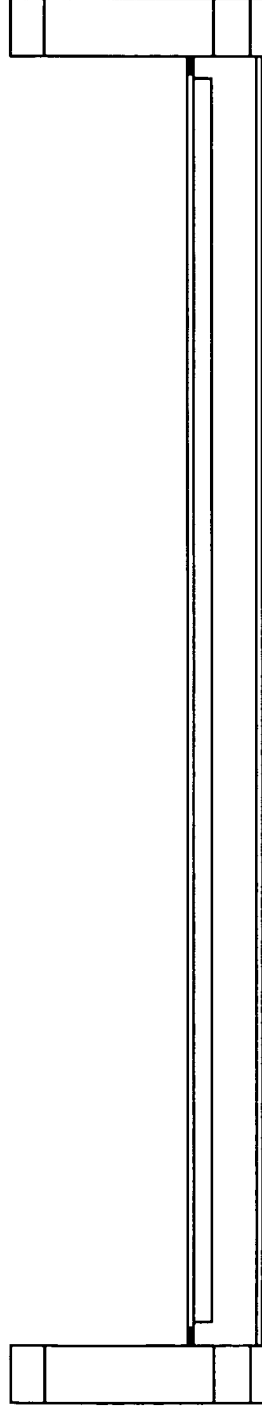


FIG. 15D: Right view of a floor frame (20 foot high cube collapsible cargo container)

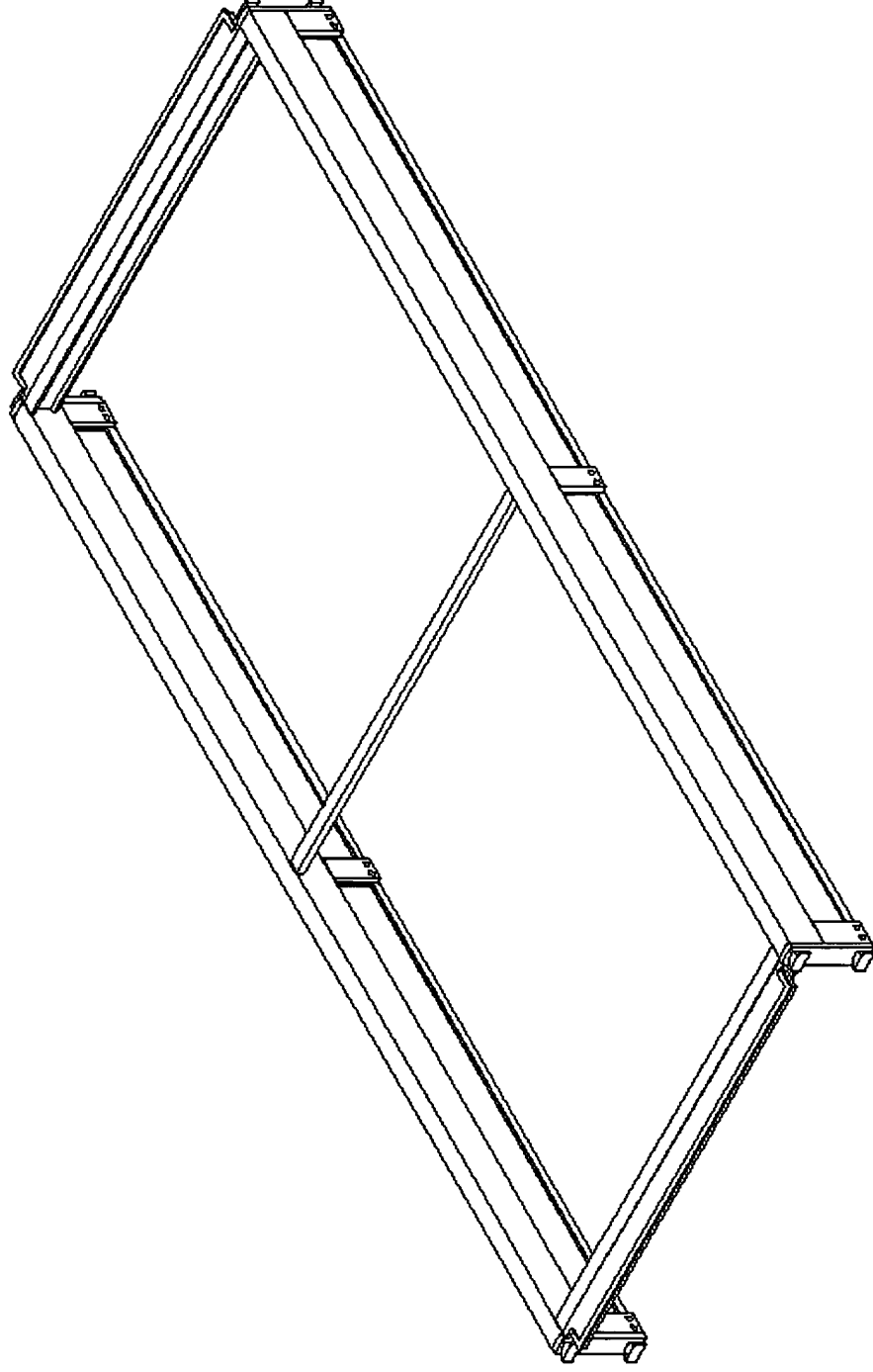


FIG. 16D: Isometric view of a ceiling frame (20 foot high cube collapsible cargo container)

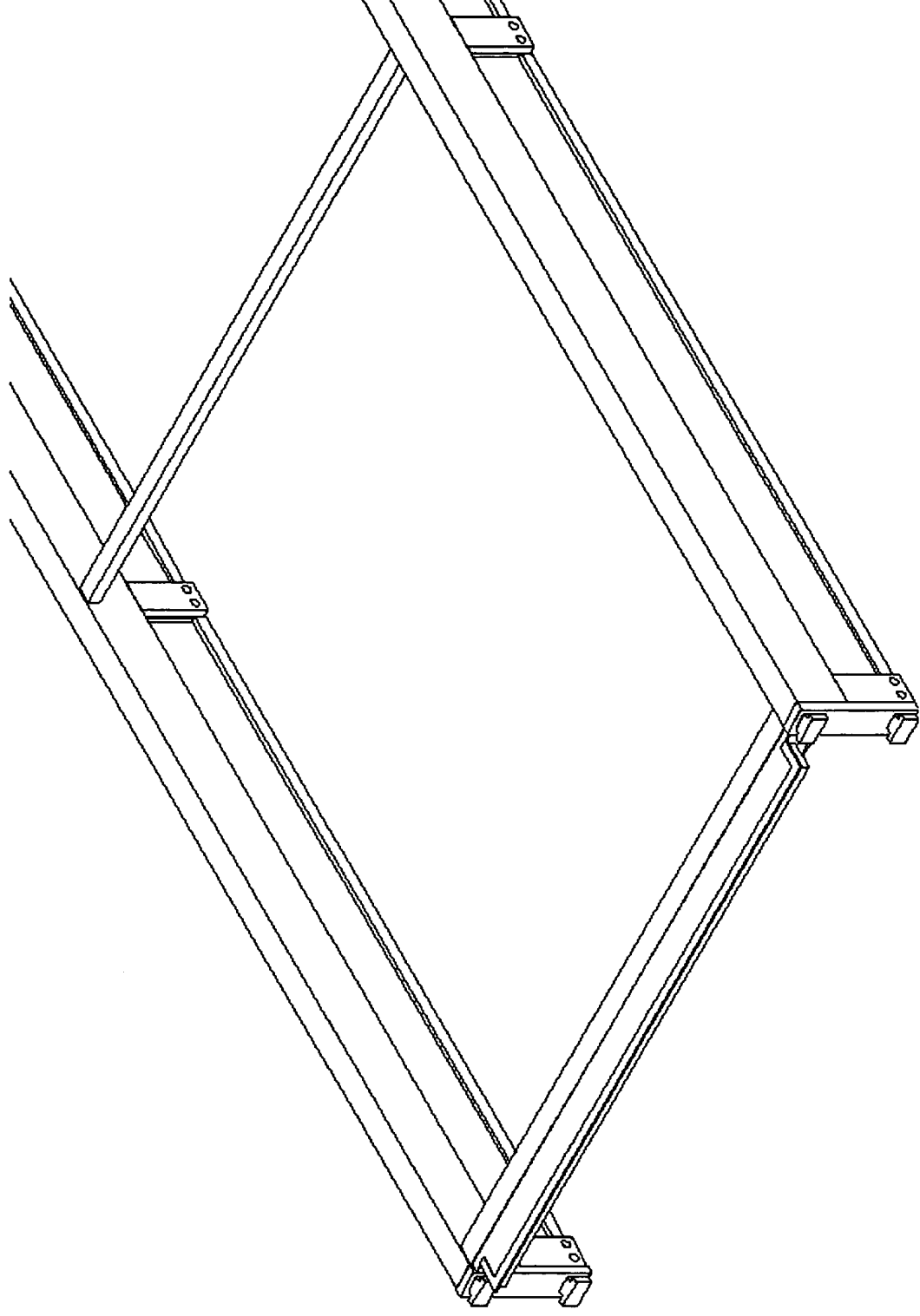


FIG. 21D: Isometric view of the right end of a ceiling frame (20 foot high cube collapsible cargo container)

COLLAPSIBLE CARGO CONTAINER
Dennis Zhu Ouyang 847-781-5319

131 of 185

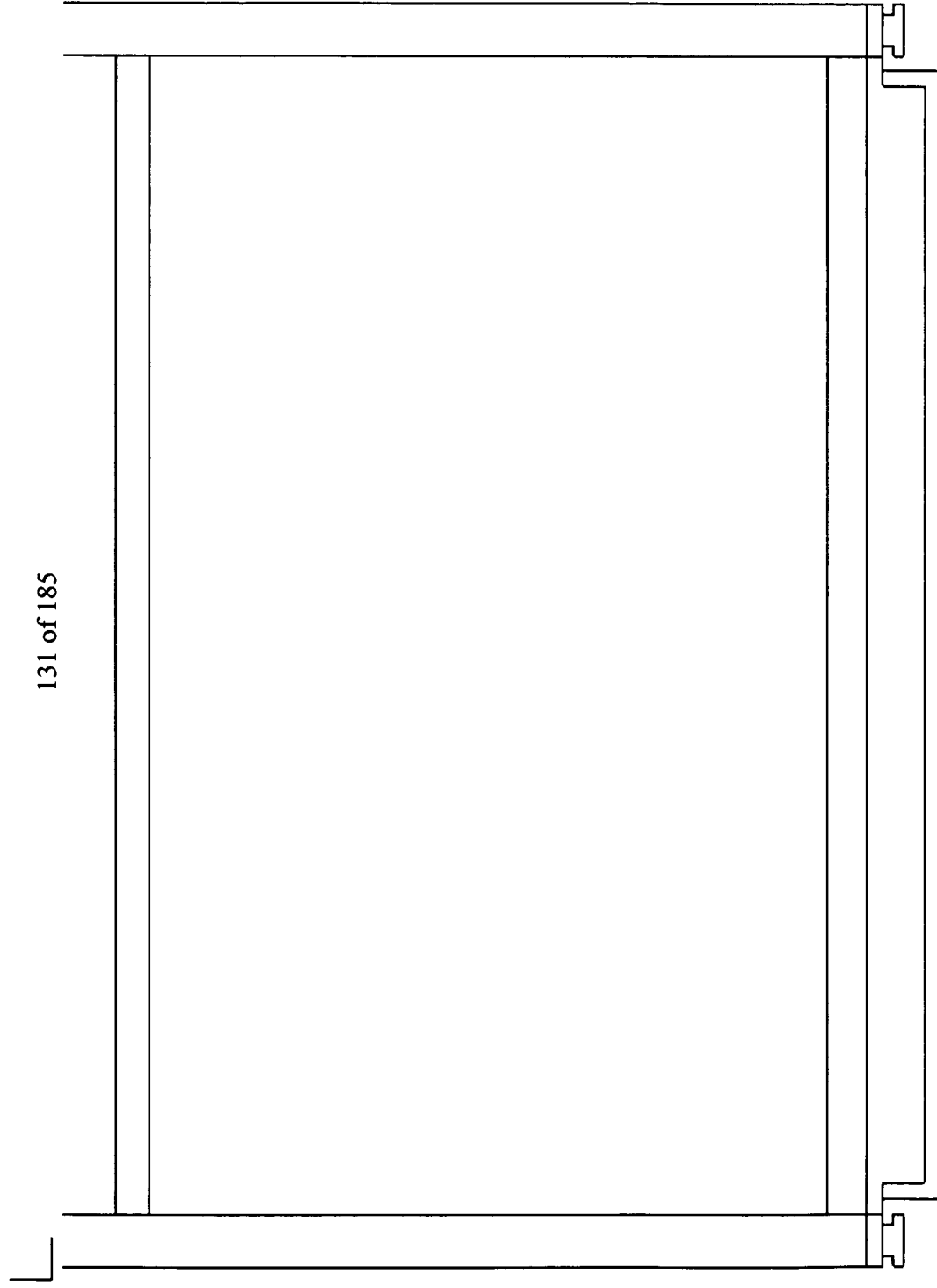


FIG. 22D: Top view of the right end of a ceiling frame (20 foot high cube collapsible cargo container)



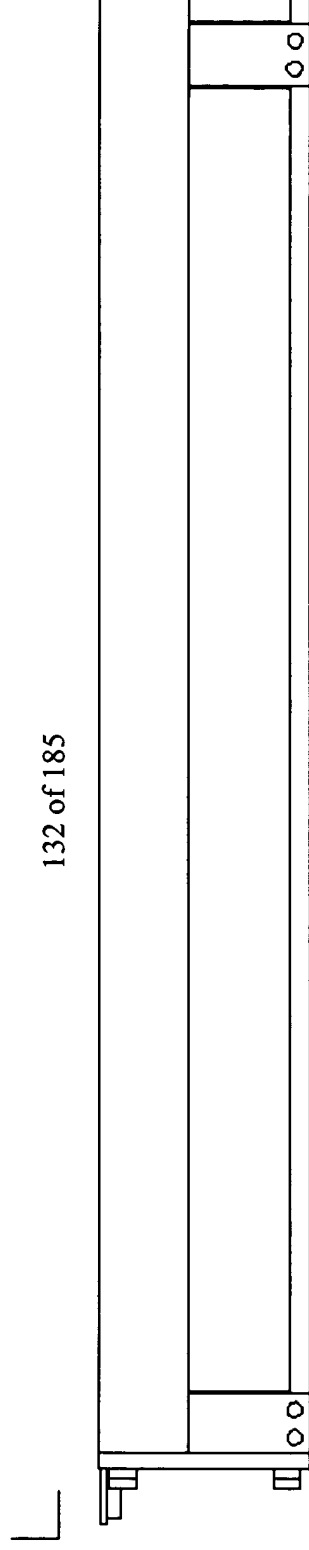


FIG. 23D: Front view of the right end of a ceiling frame (20 foot high cube collapsible cargo container)

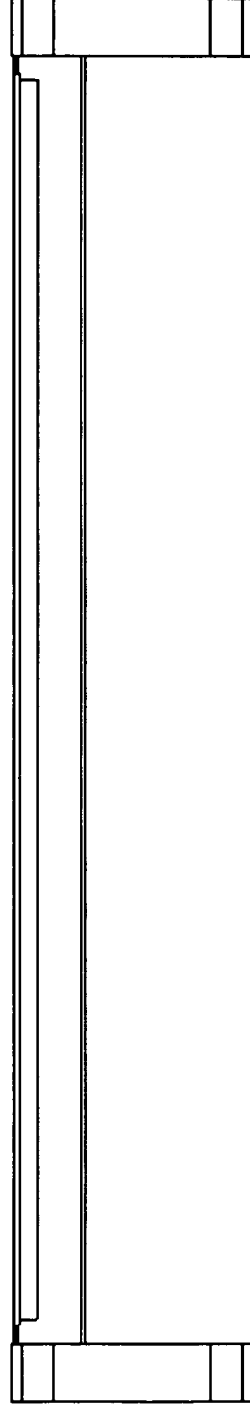


FIG. 24D: Right view of a ceiling frame (20 foot high cube collapsible cargo container)

133 of 185

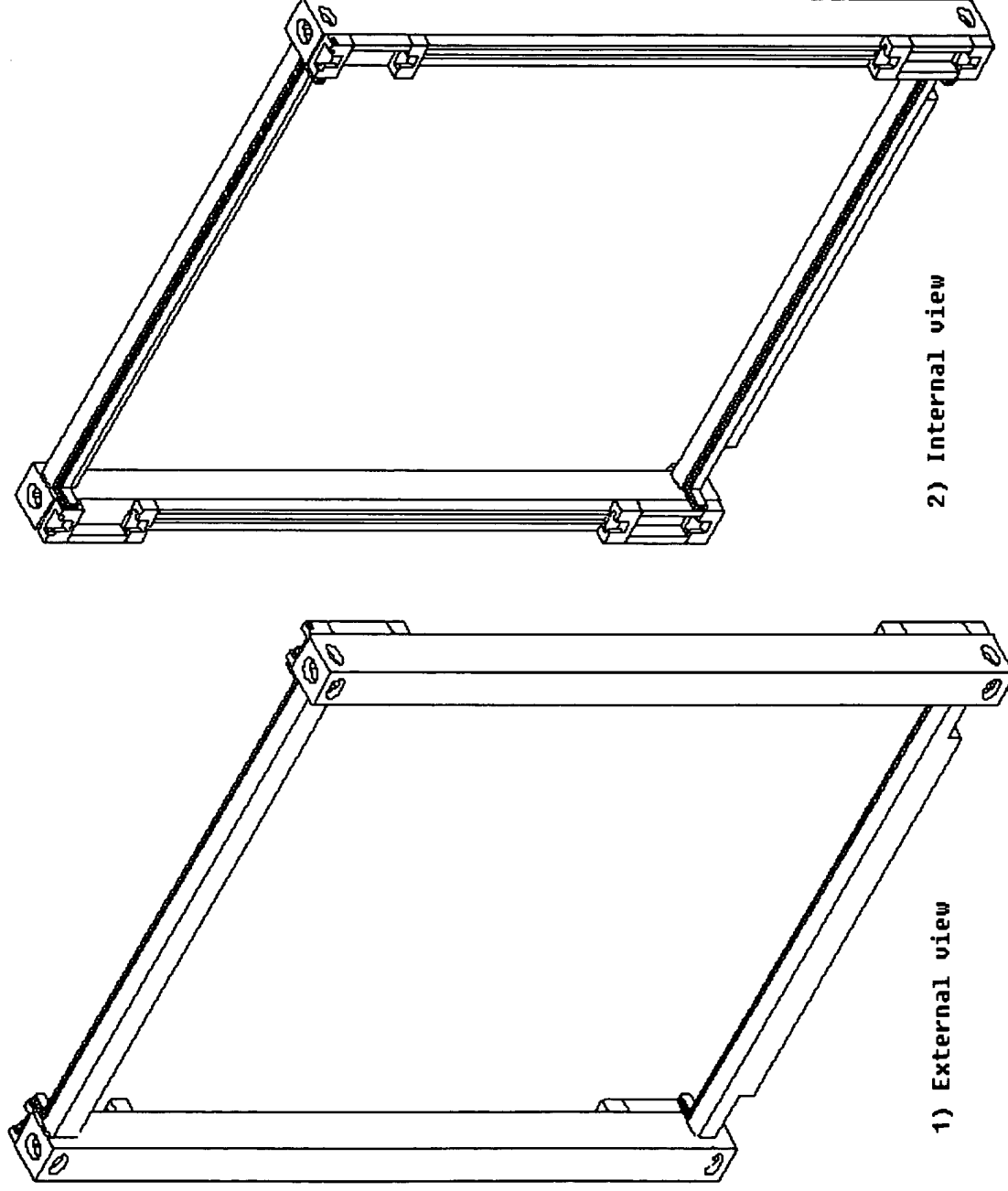


FIG. 25D: Isometric views of a left frame (20 foot high cube collapsible cargo container)

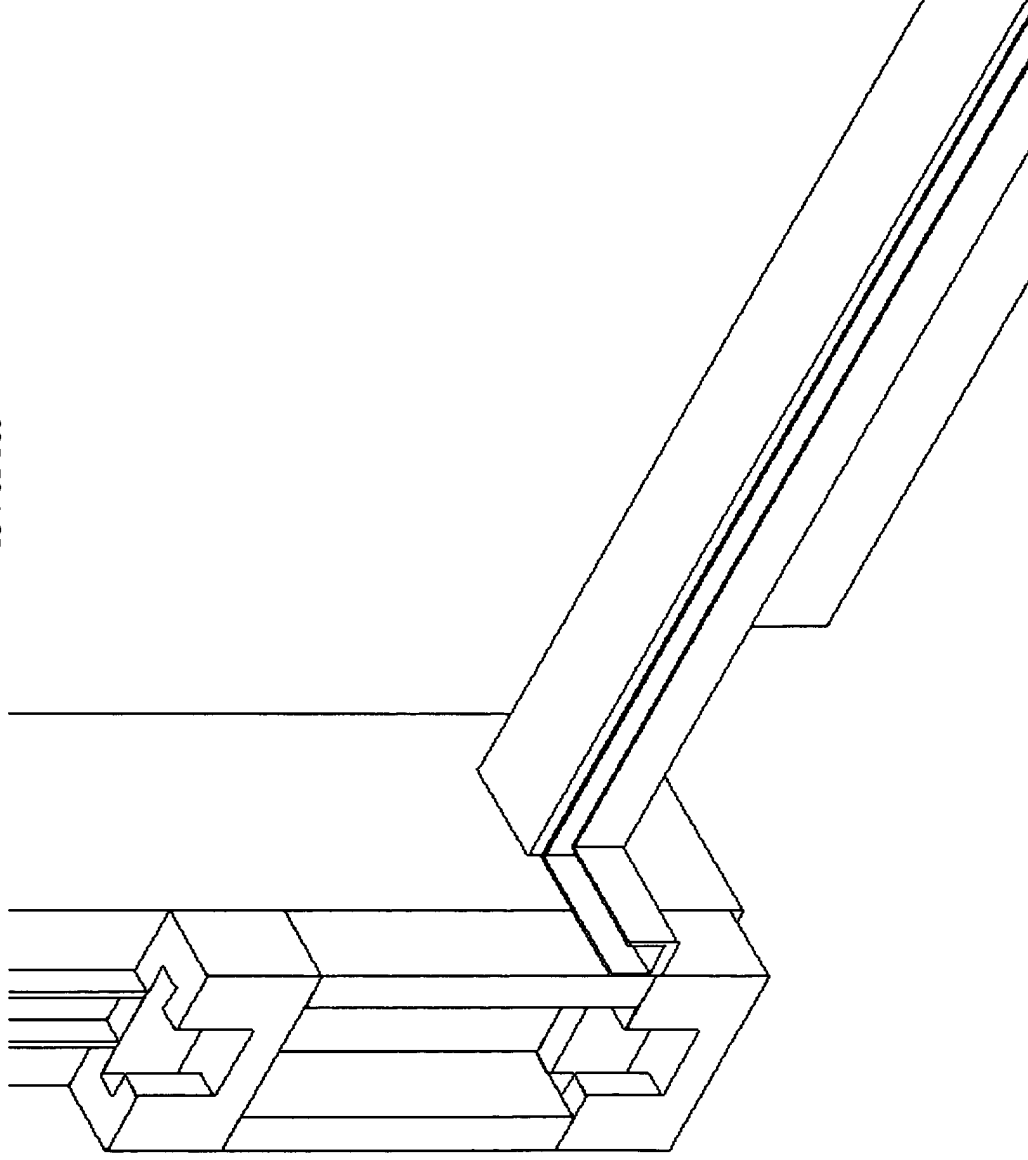


FIG. 26D: Isometric internal view of the corner of a left frame (20 foot high cube collapsible cargo container)

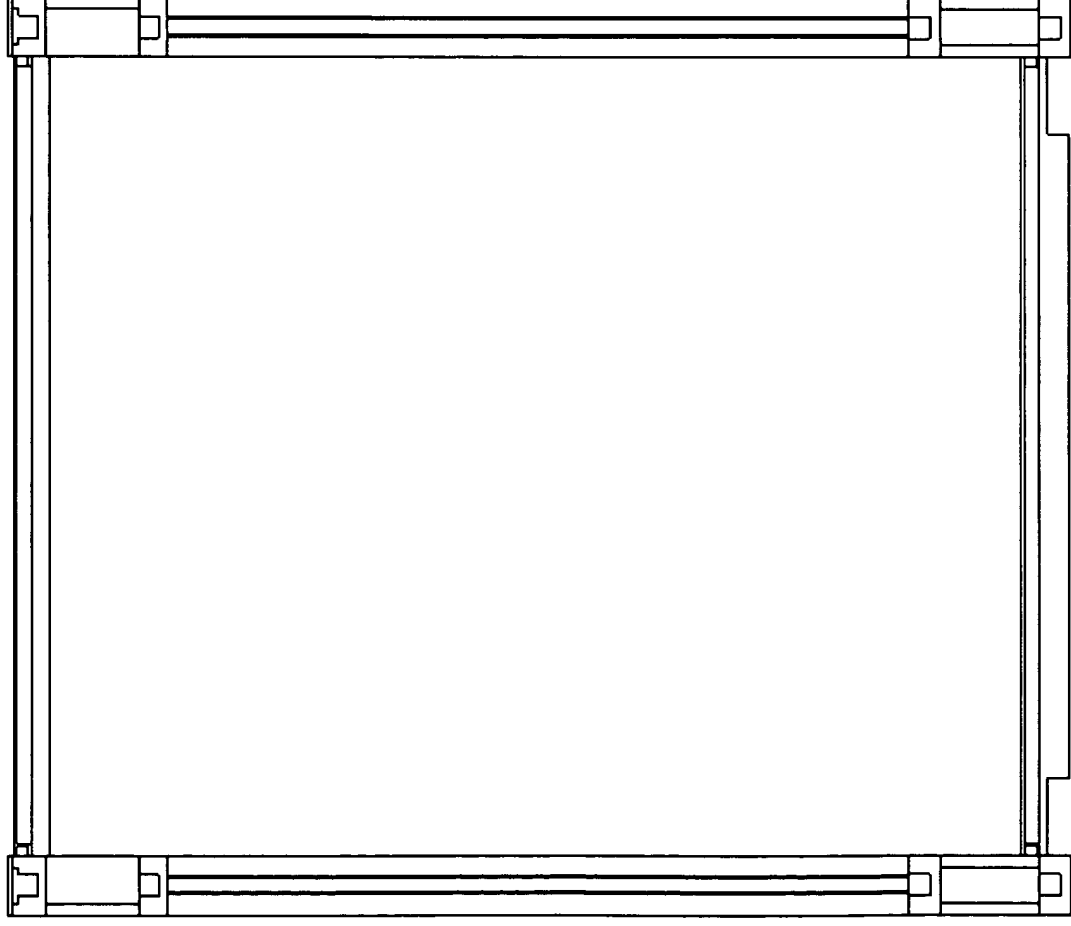


FIG. 27D: Internal view of a left frame (20 foot high cube collapsible cargo container)

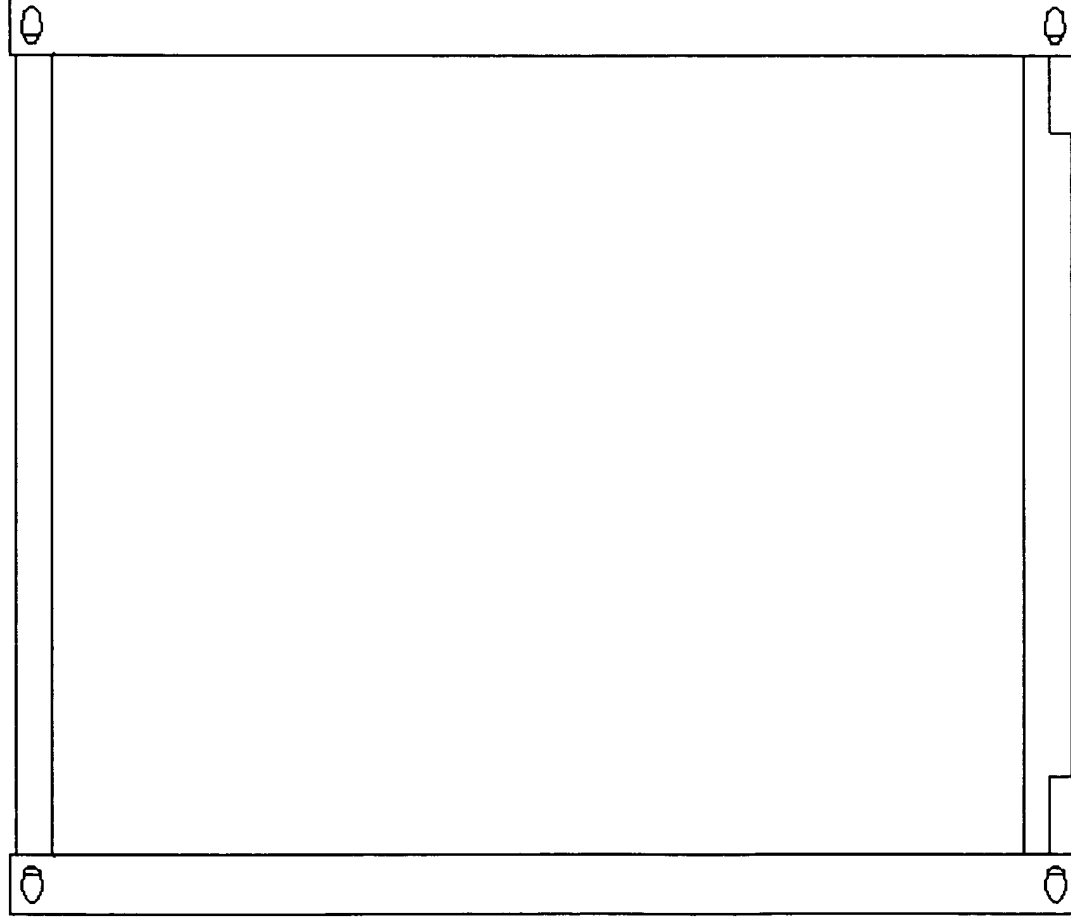


FIG. 28D: External view of a left frame (20 foot high cube collapsible cargo container)

137 of 185

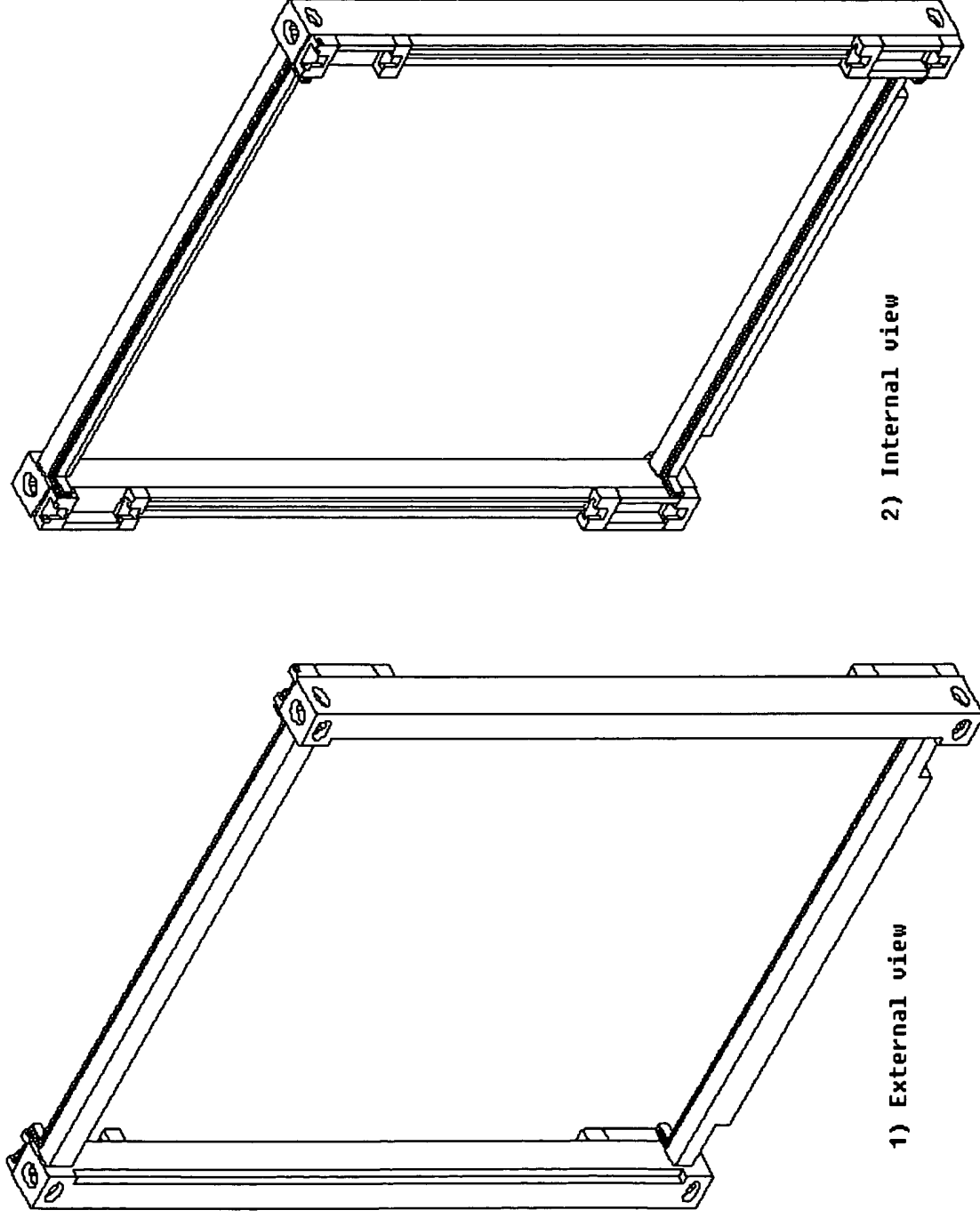


FIG. 29D: Isometric views of a right frame (20 foot high cube collapsible cargo container)

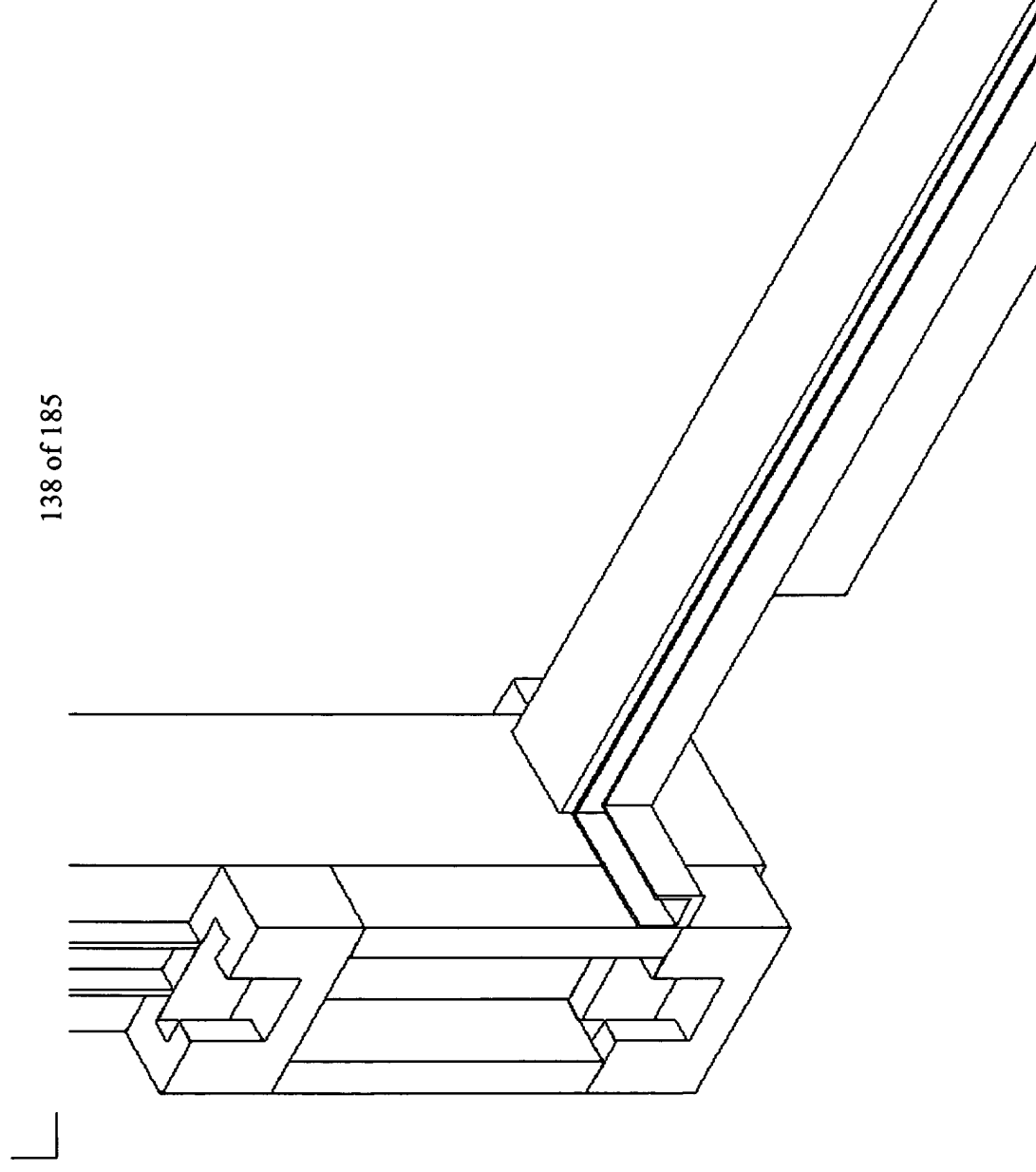


FIG. 30D: Isometric internal view of the corner of a right frame (20 foot high cube collapsible cargo container)

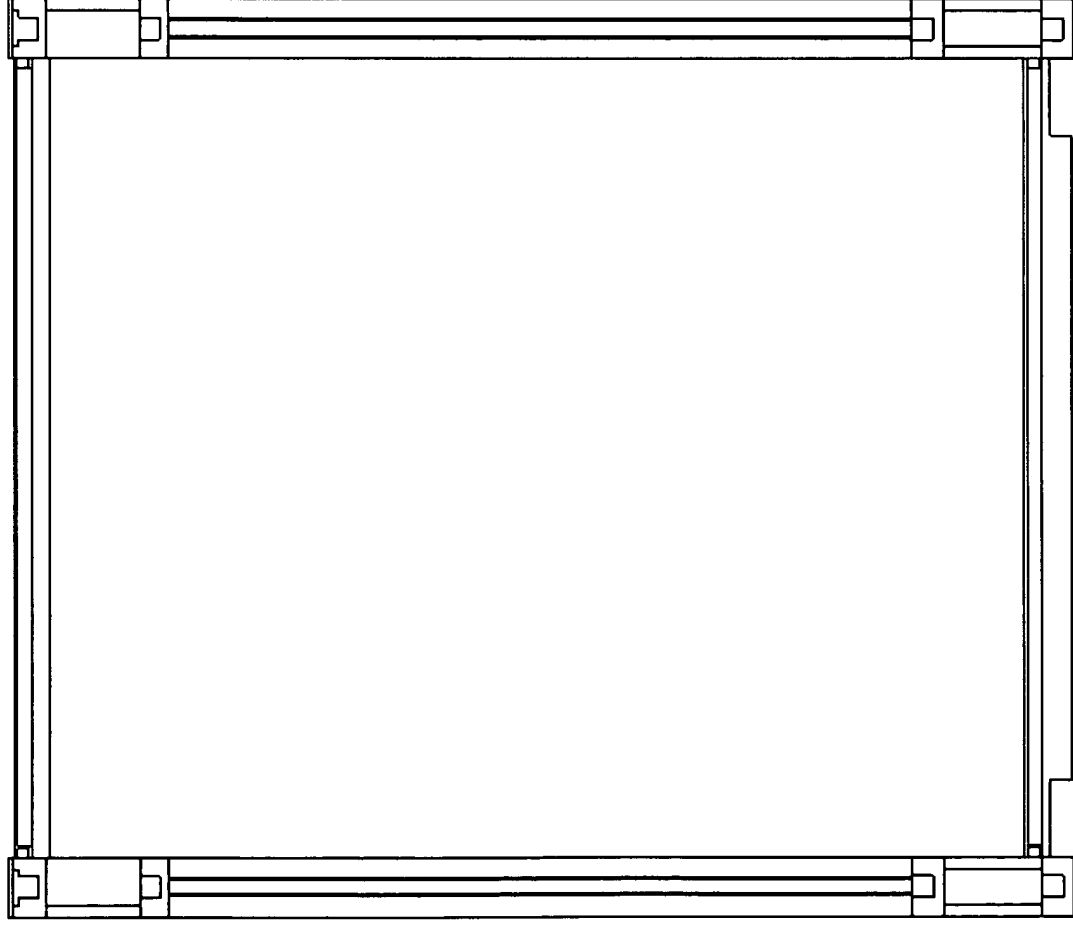


FIG. 31D: Internal view of a right frame (20 foot high cube collapsible cargo container)

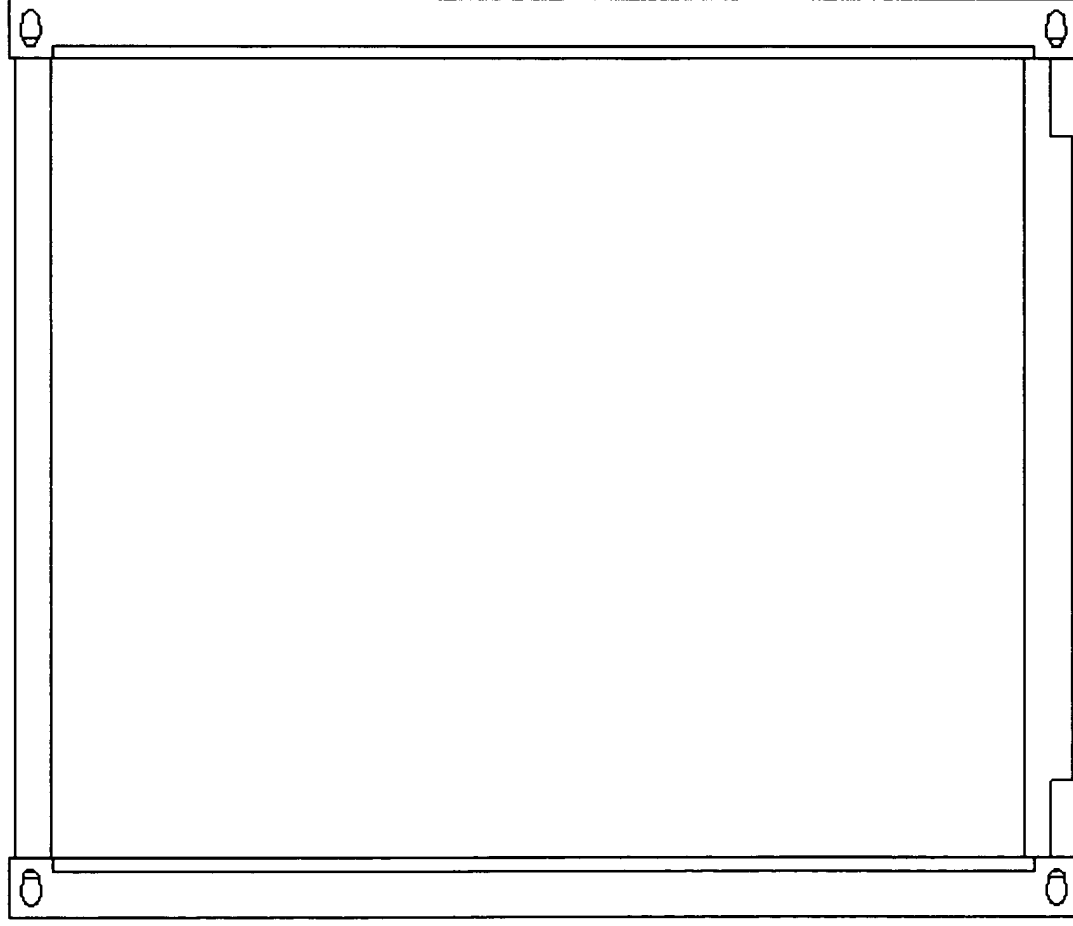


FIG. 32D: External view of a right frame (20 foot high cube collapsible cargo container)

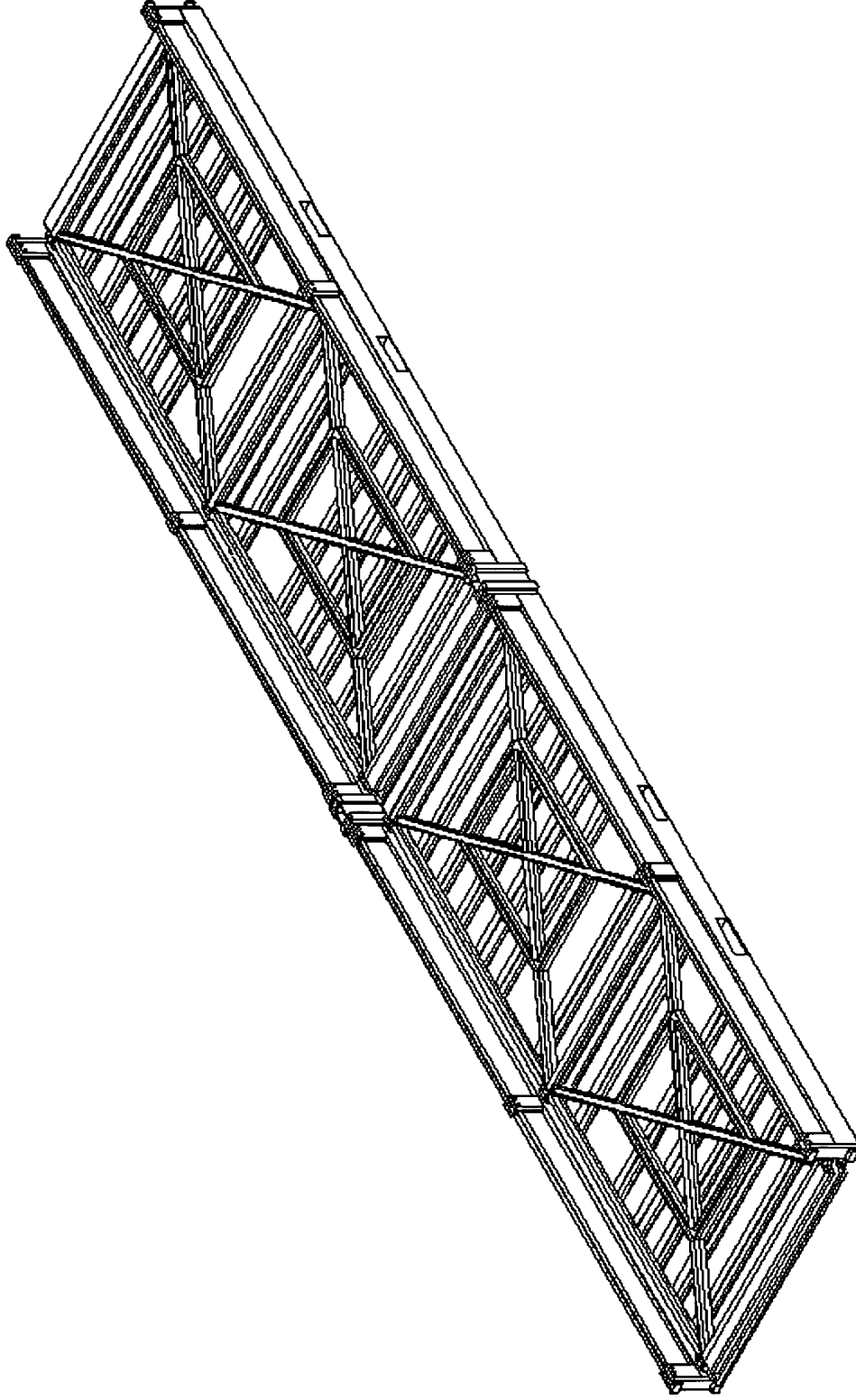


FIG. 35D: Isometric view of connected floor frames that contains two front frames and two back frames (20 foot high cube collapsible cargo container)

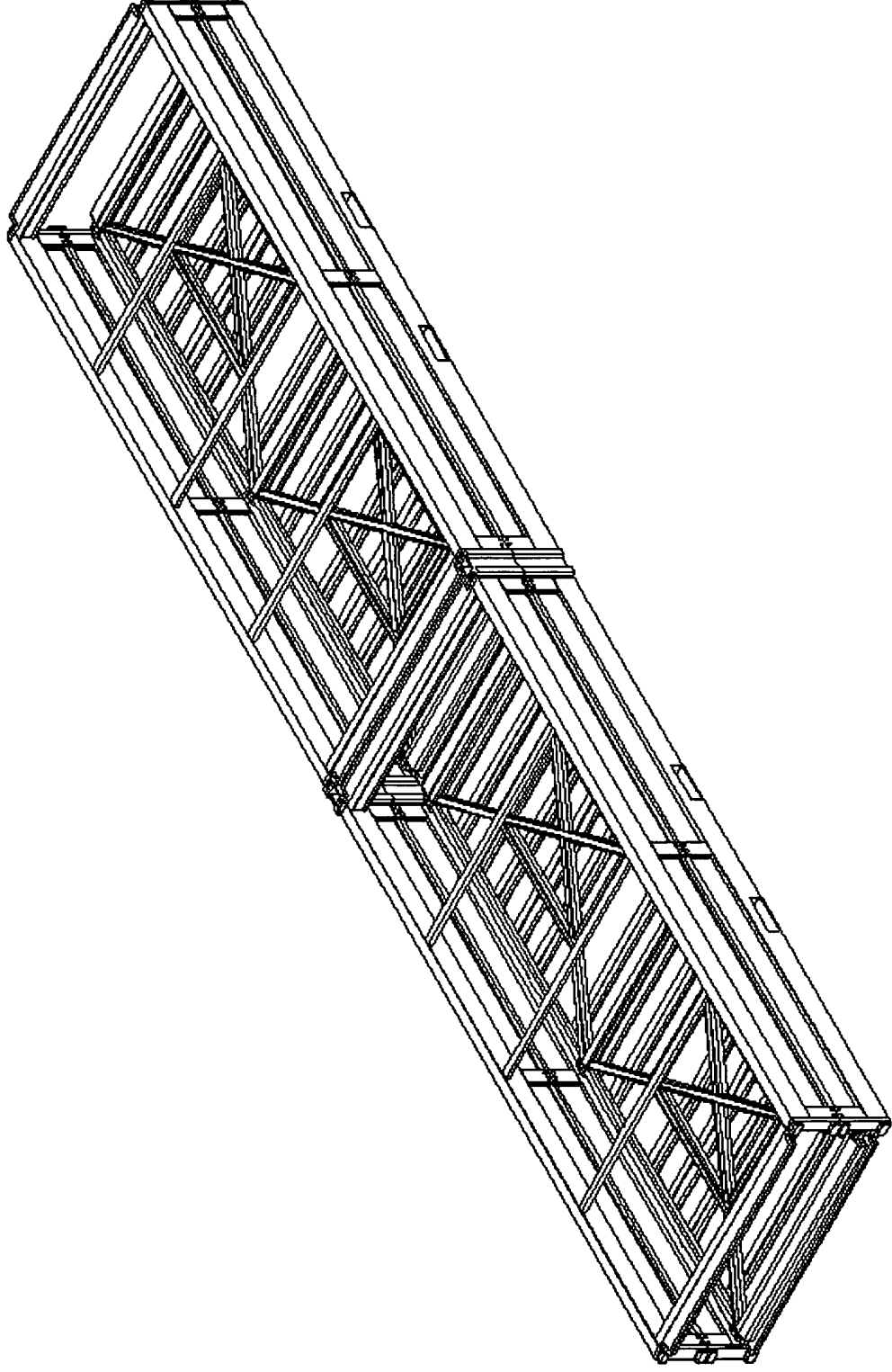


FIG. 36D: Isometric view of connected ceiling frames stacked on top of connected floor frames that contains two front frames and two back frames (20 foot high cube collapsible cargo container). This assembly is now referred as “collapsible cargo container frame panel assembly”.

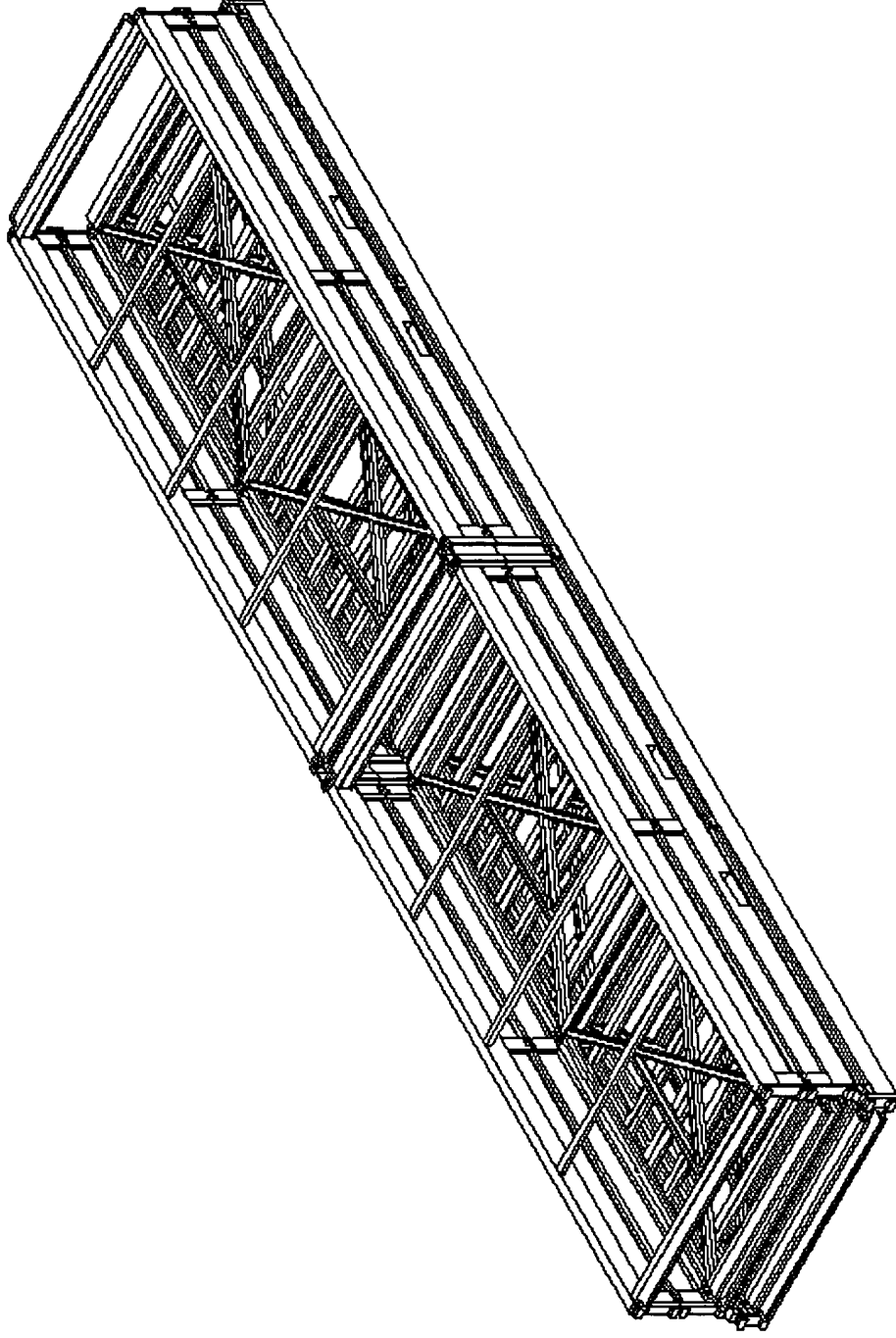


FIG. 41D: Step2 of disassemble and load process: The first "collapsible cargo container frame panel assembly" is stacked on top of the shipping frame panel (shown in FIG. 39A/C/D)

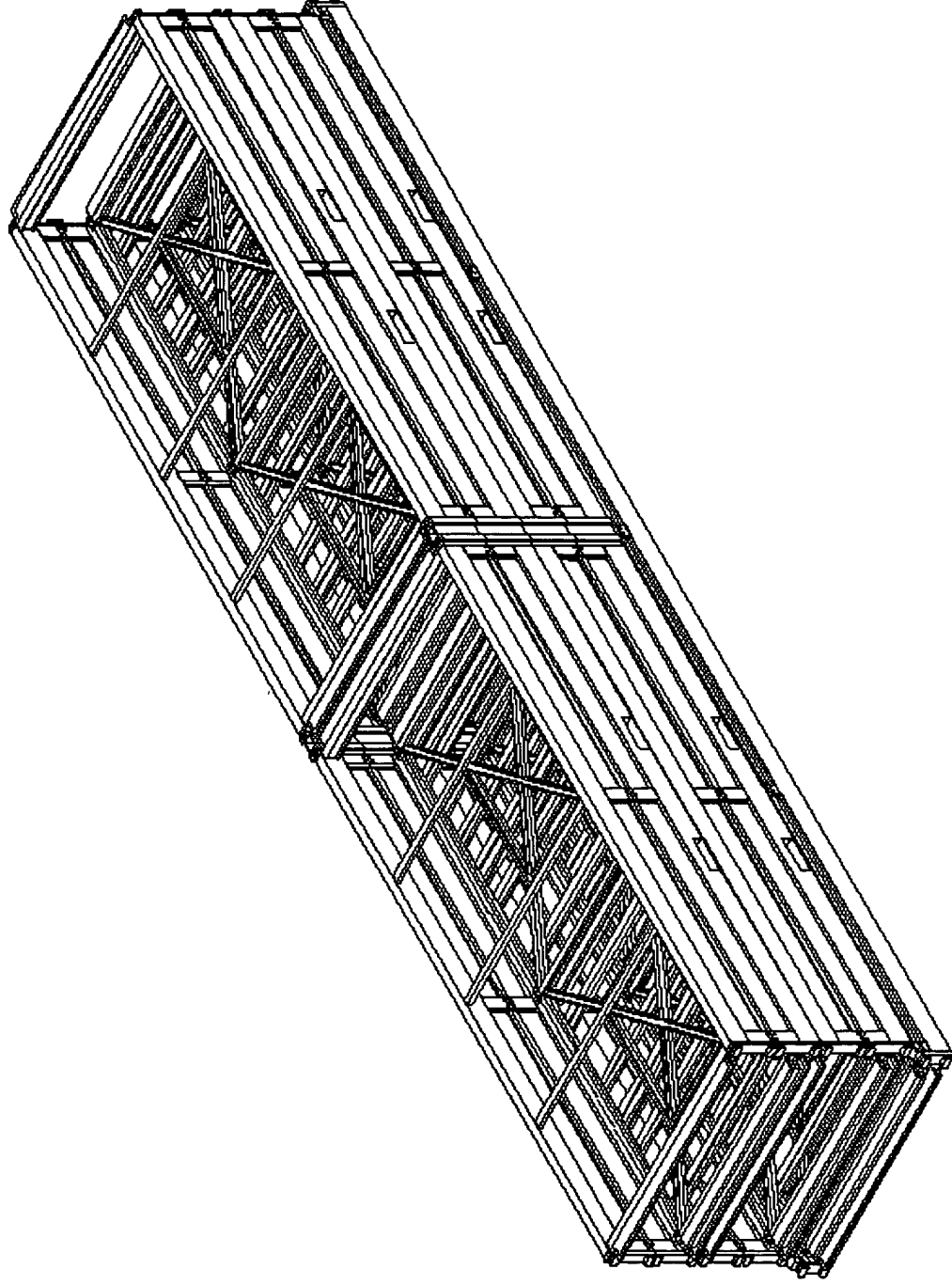


FIG. 42D: Step3 of disassemble and load process: The second “collapsible cargo container frame panel assembly” is stacked on top of previous assembly.

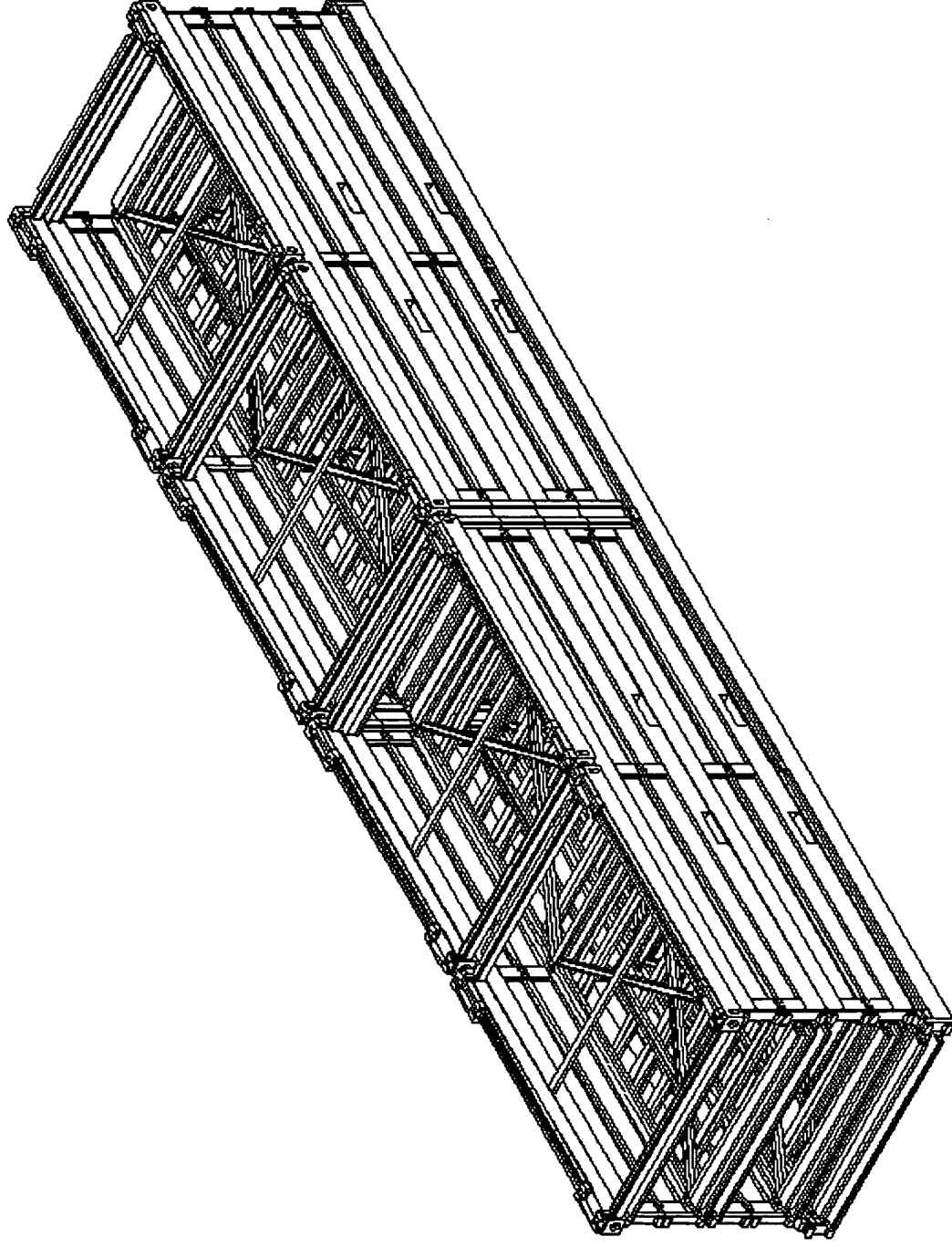


FIG. 43D: Step4 of disassemble and load process: The left and right frames from 2 disassembled 20 foot high cube collapsible cargo containers are stacked on top of the previous assembly.

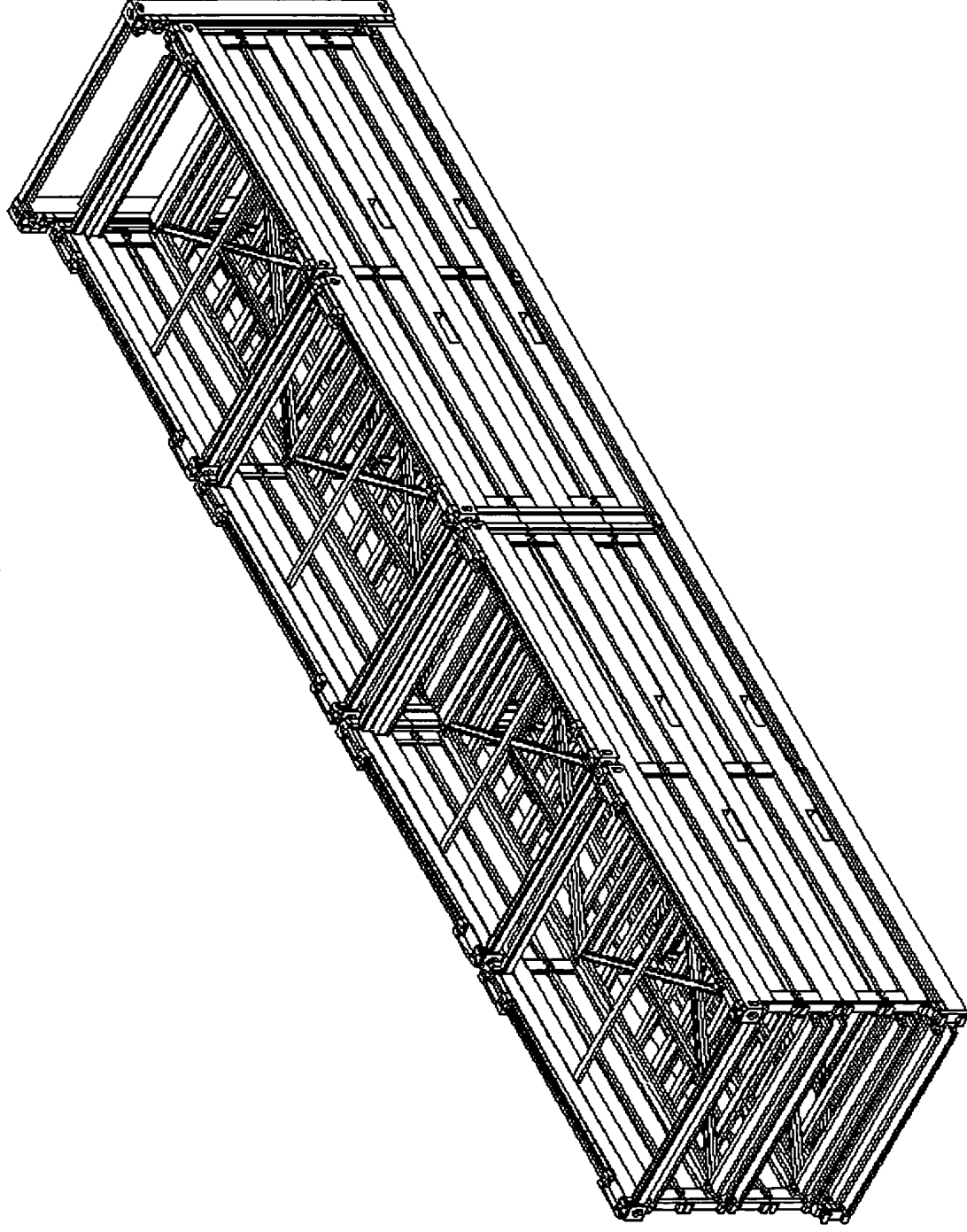


FIG. 44D: Step5 of disassemble and load process: The left frame of the 40 foot shipping collapsible cargo container is assembled.

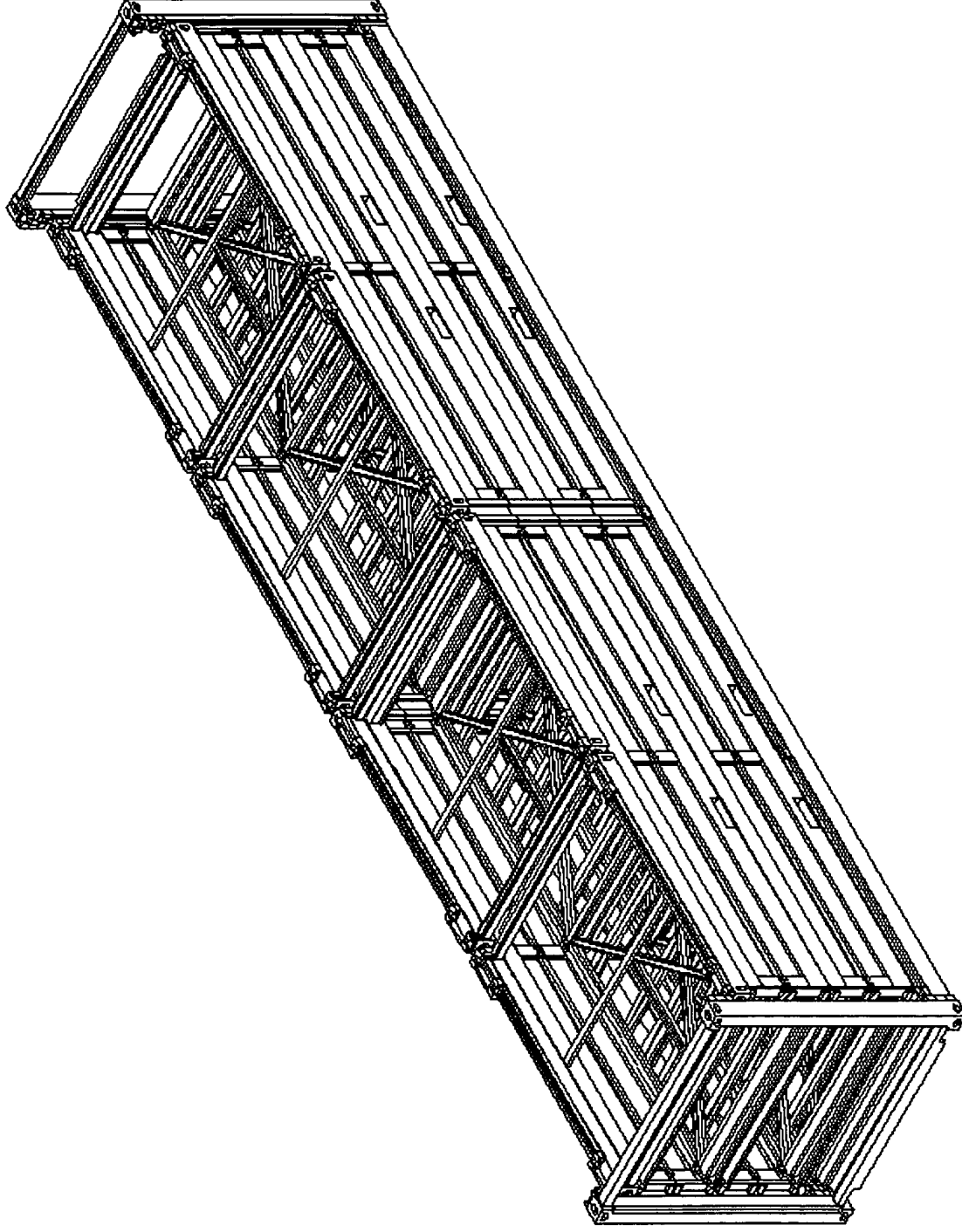


FIG. 45D: Step6 of disassemble and load process: The right frame of the 40 foot shipping collapsible cargo container is assembled.

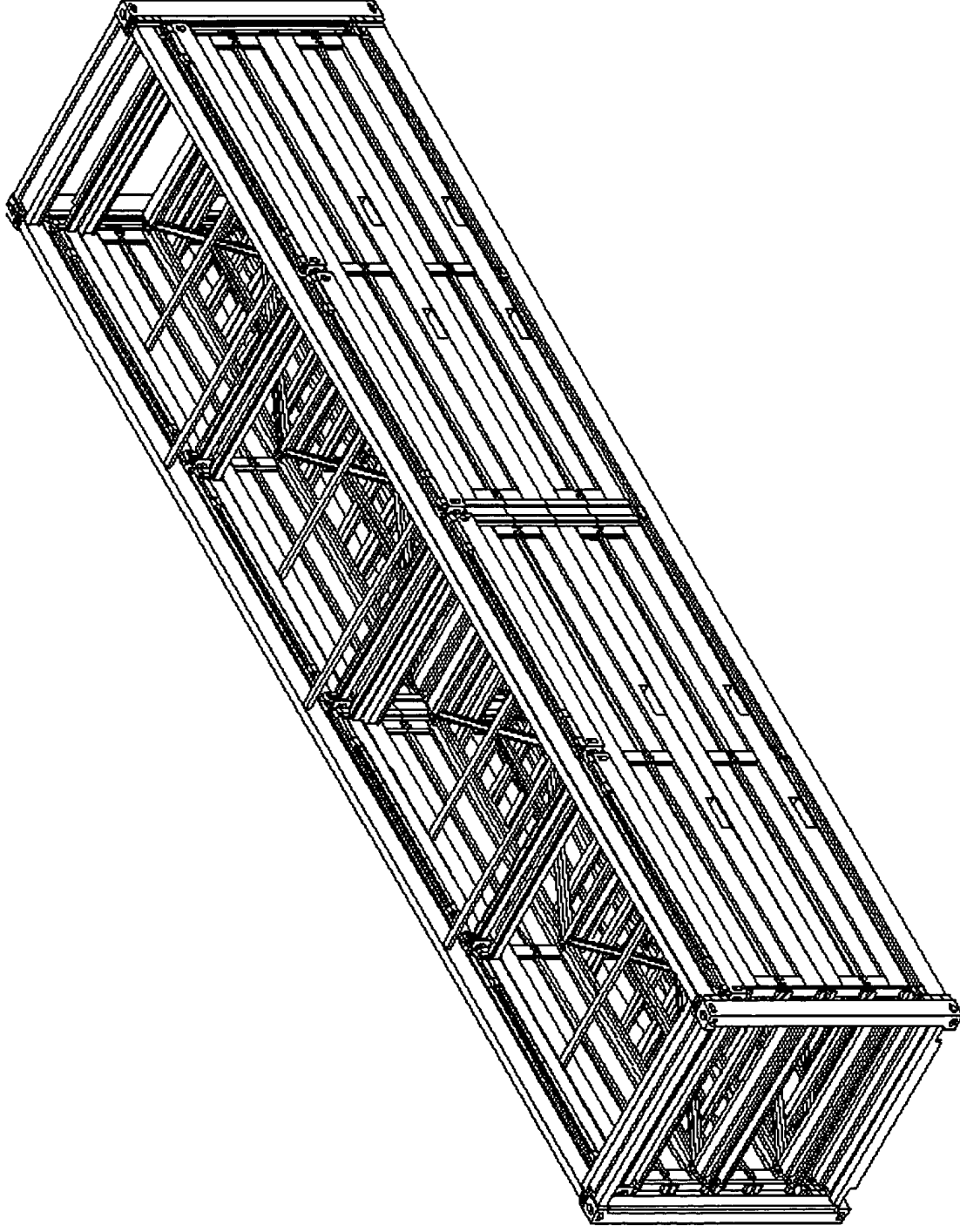


FIG. 46D: Step7 of disassemble and load process: The ceiling frame of the 40 foot shipping collapsible cargo container is assembled.

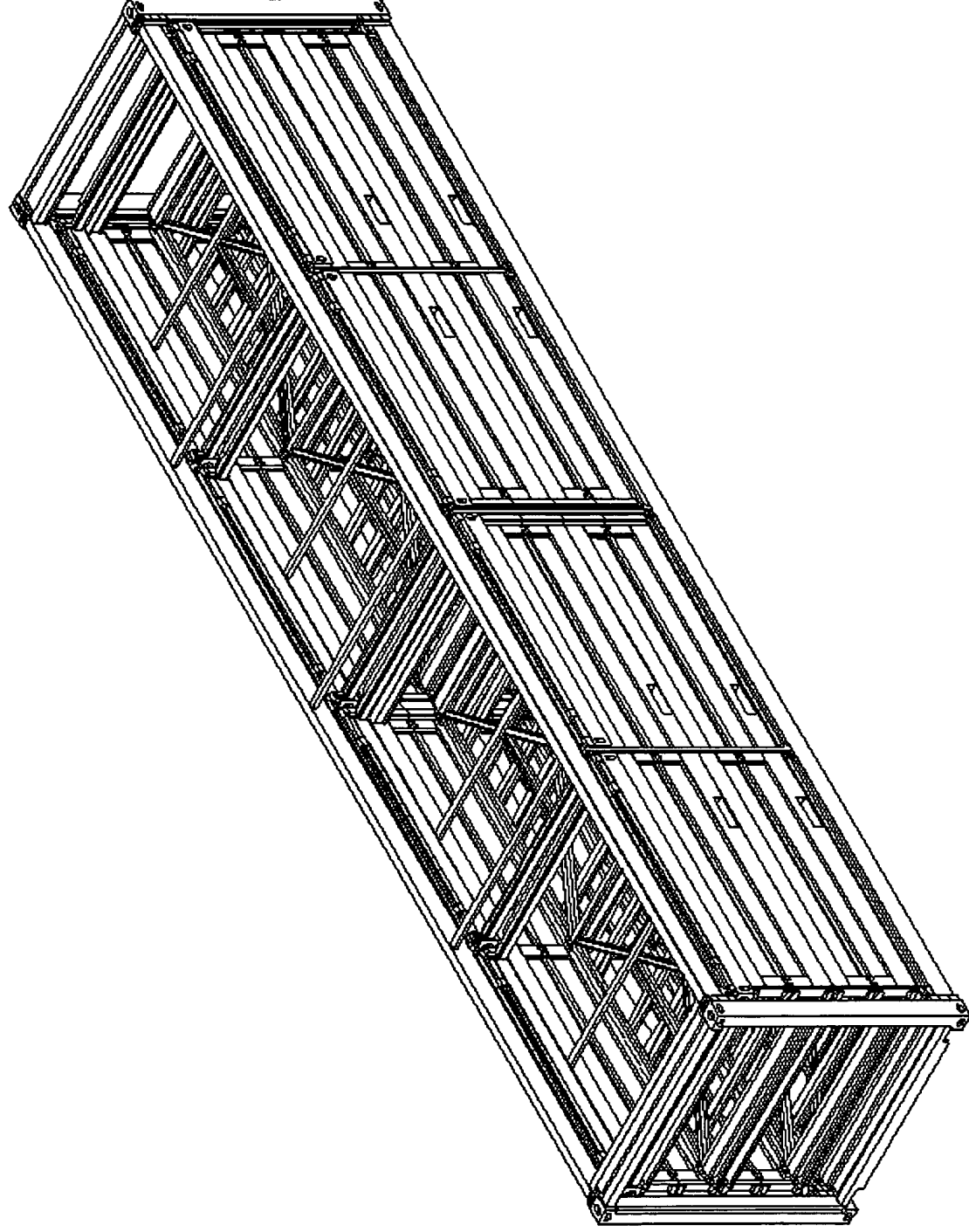


FIG. 47D: Step8 of disassemble and load process: The six vertical beams are assembled.

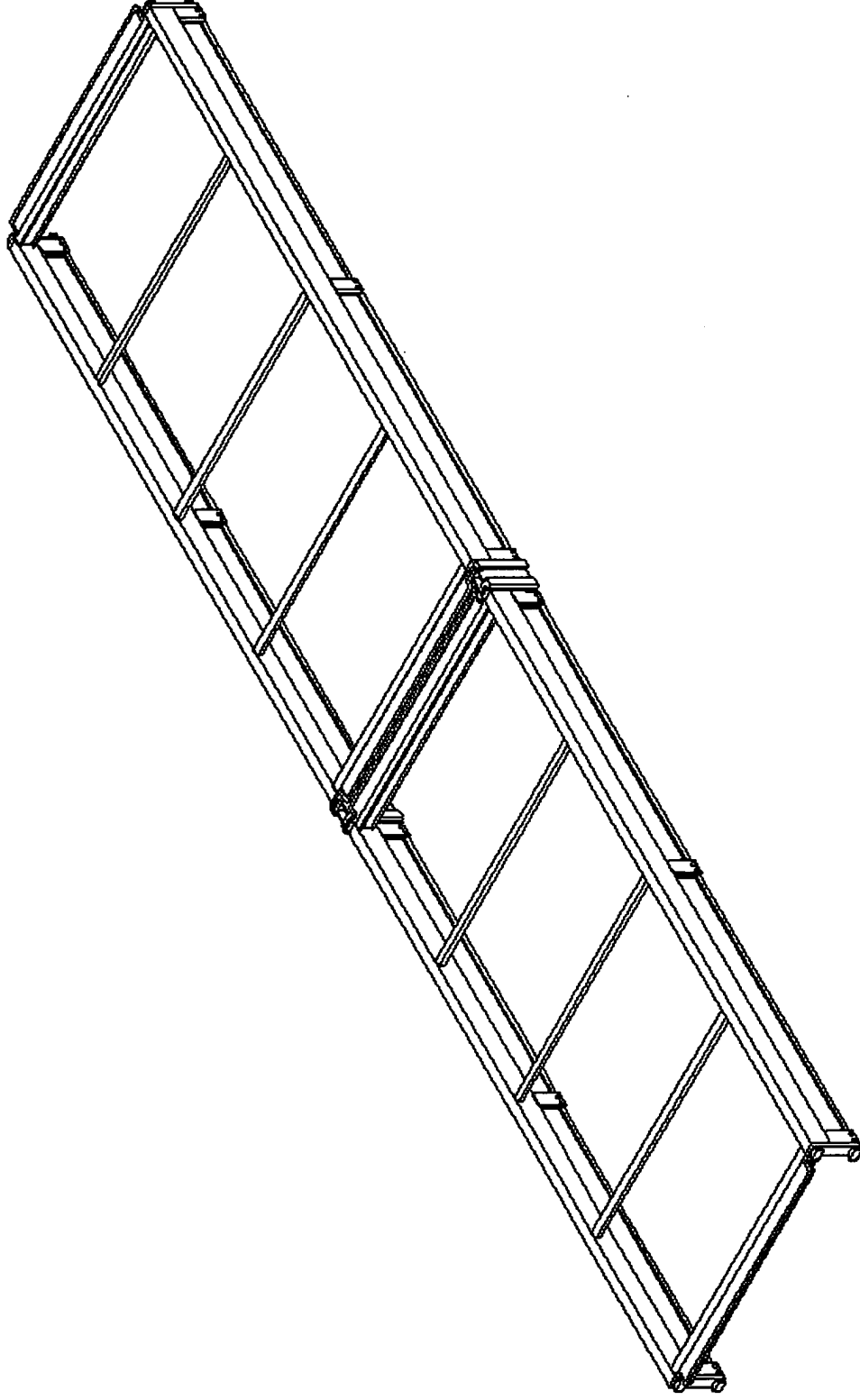


FIG. 49D: Two connectors connect two ceiling frame panels during the shipping process (20 foot high cube collapsible cargo container)

151 of 185

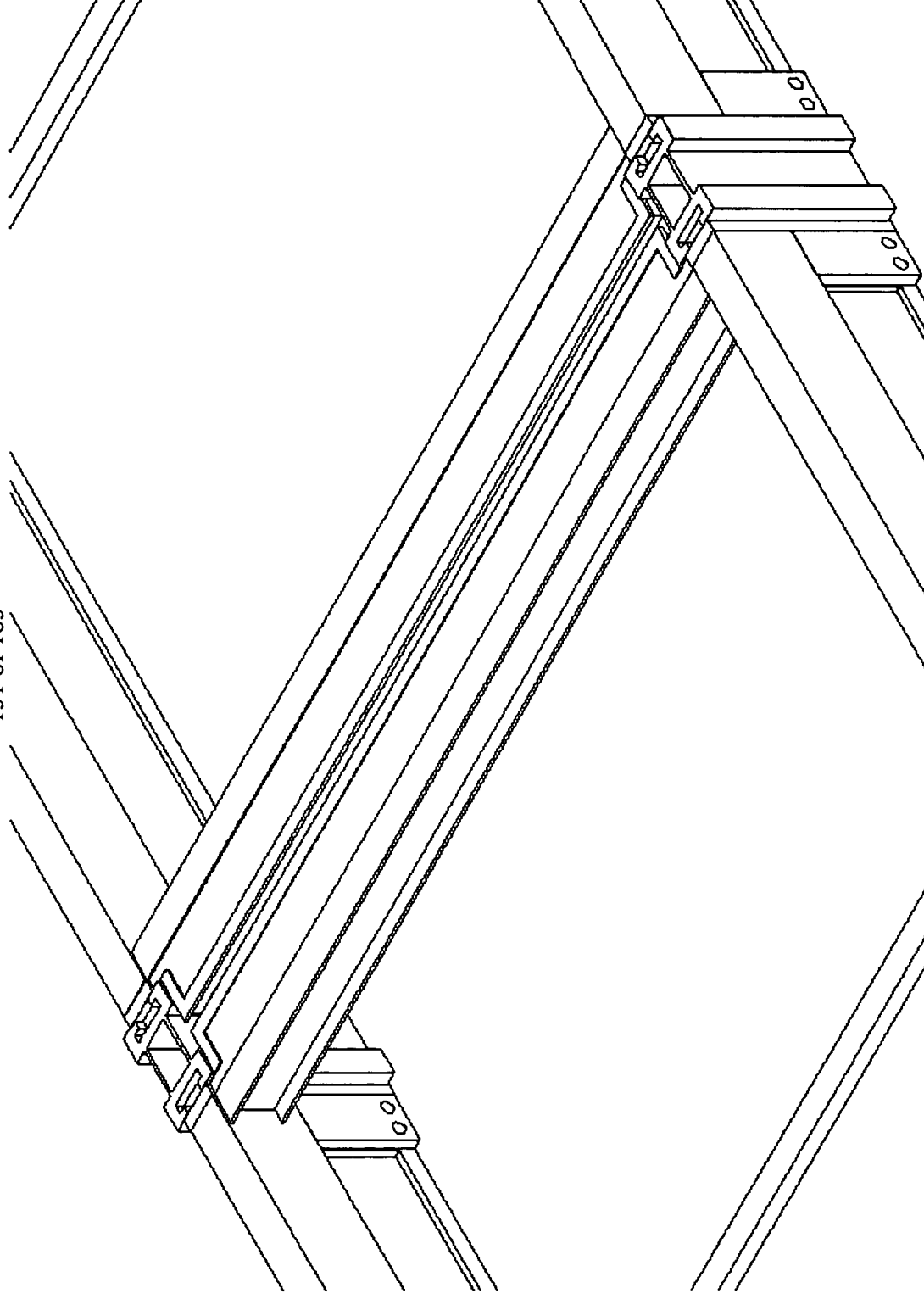


FIG. 50D: Detail view based on FIG. 49D.

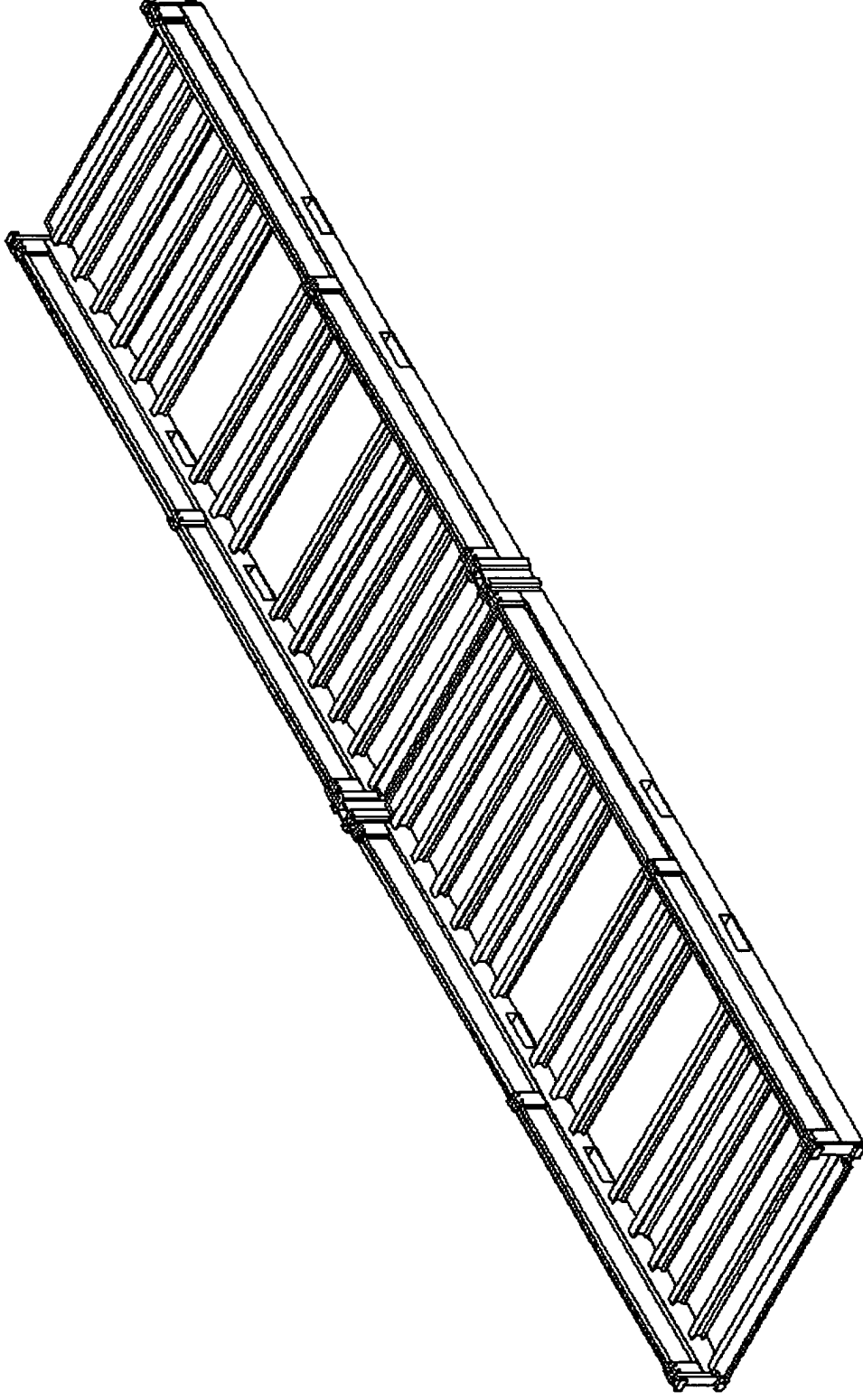


FIG. 51D: Two connectors connect two floor frame panels during the shipping process (20 foot high cube collapsible cargo container).

153 of 185

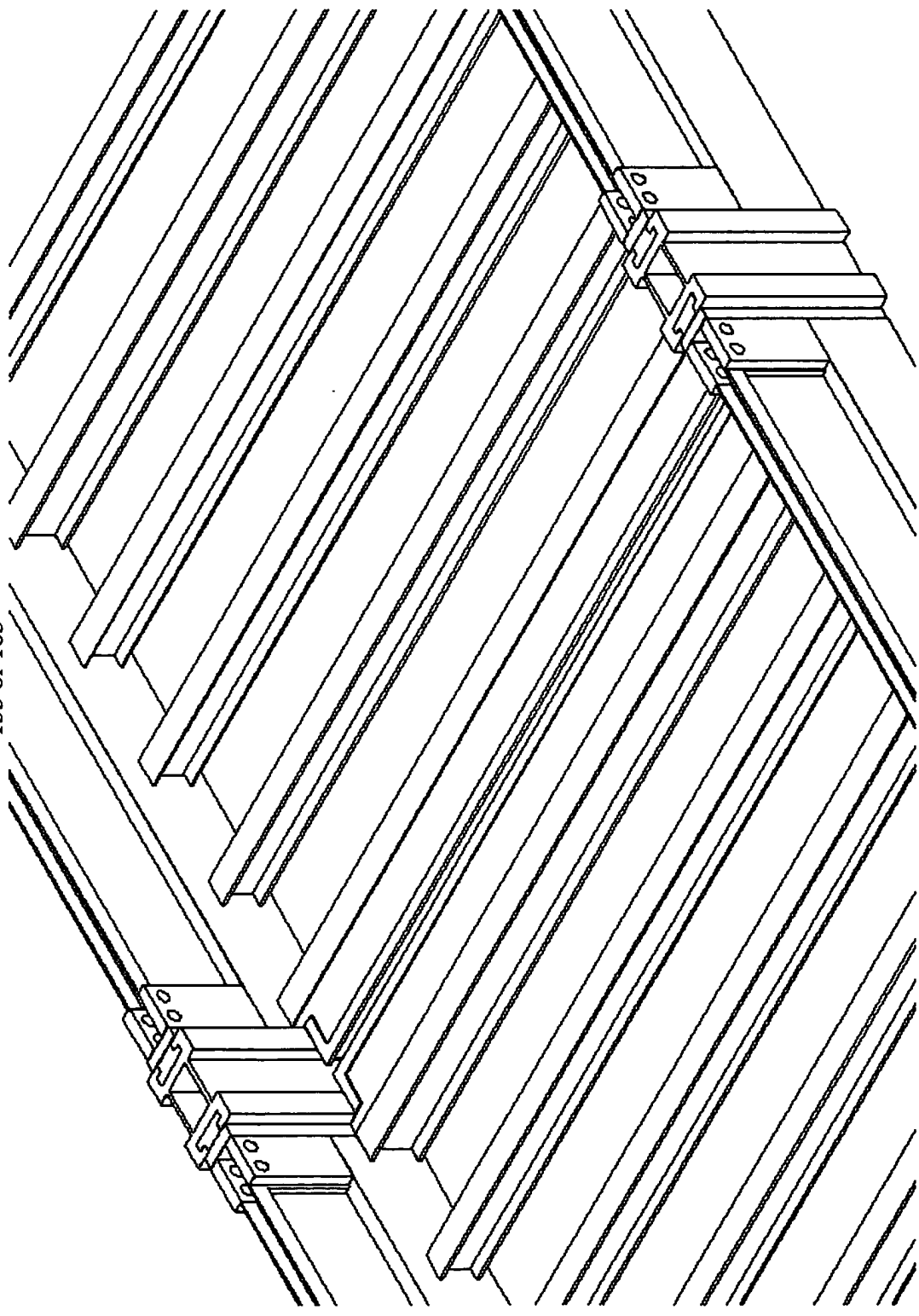


FIG. 52D: Detail view based on FIG. 51D.

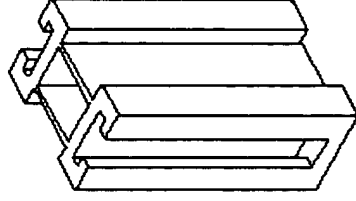
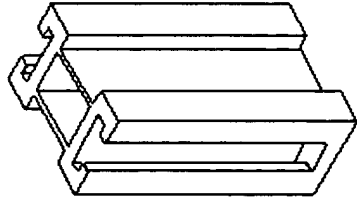


FIG. 53D: Two connectors used to connect two floor frame panels as well as two ceiling frame panels (20 foot high cube collapsible cargo container)

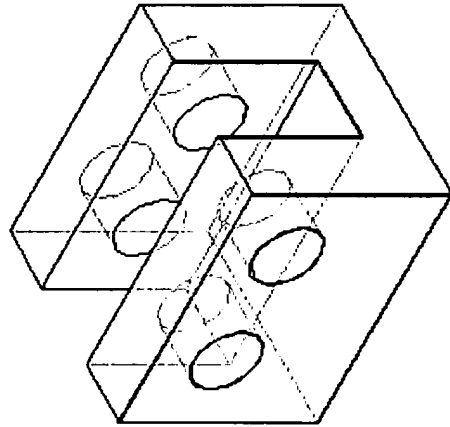


FIG. 54 The female pin base connector on the floor and ceiling frames

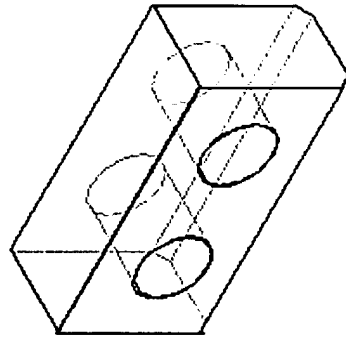


FIG. 55 The male pin base connector on the front and back frames

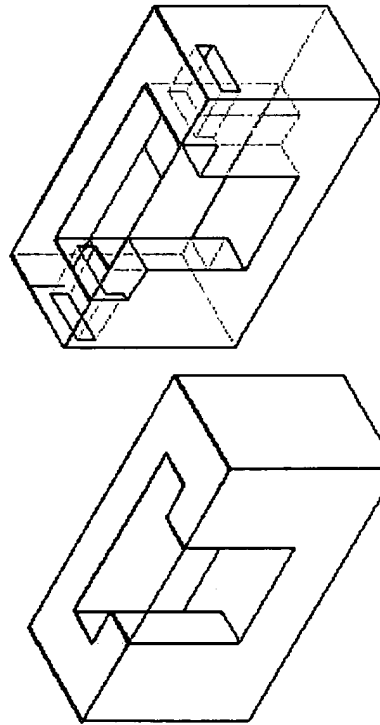


FIG. 56 The joint T pin holders on the left and right frame columns

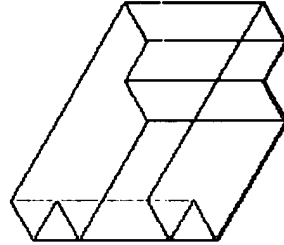


FIG. 57 The joint T pin on the floor and ceiling frames

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 156 of 185

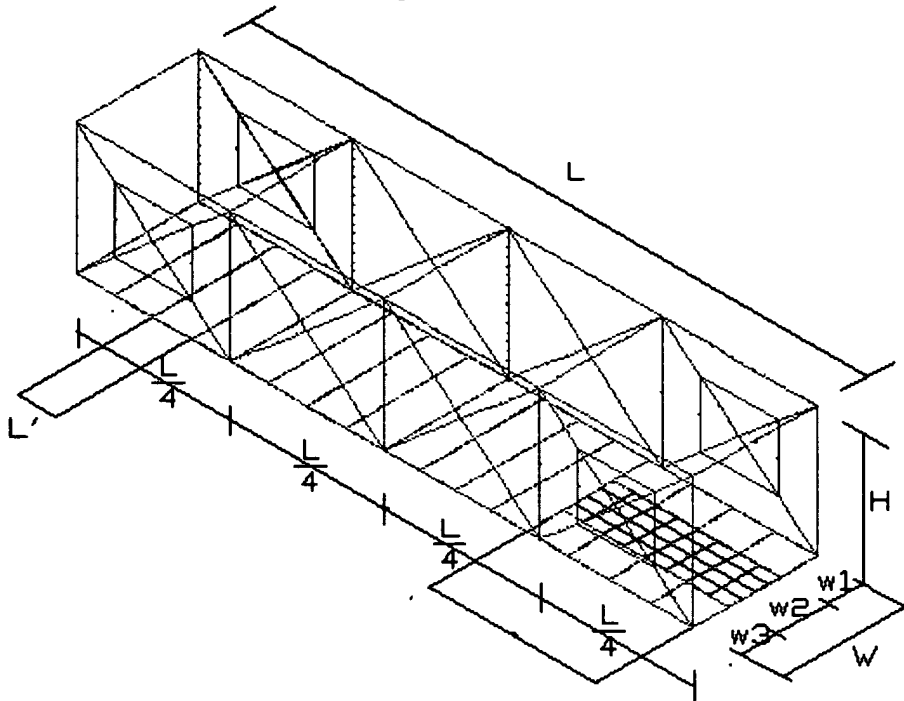


FIG. 58A/B: The frame panel structure model (40 foot and 40 foot high cube collapsible cargo container)

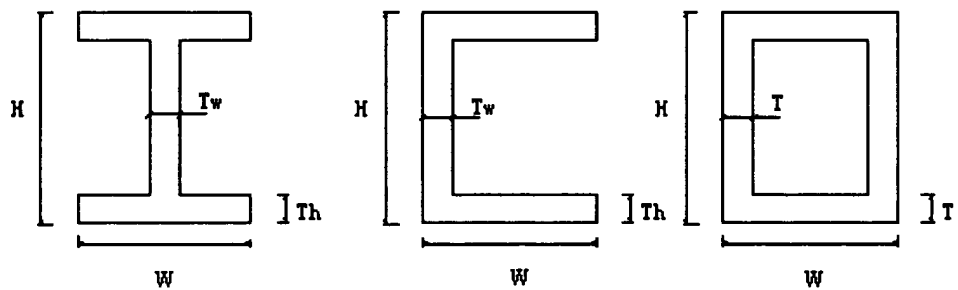


FIG. 59: I-Beam, [-Beam and []-Beam used by the collapsible container frame panel structure

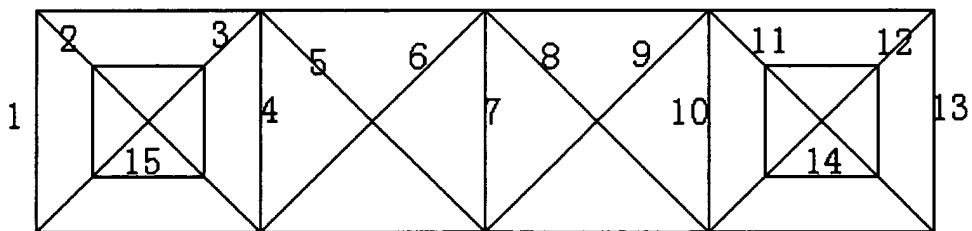


FIG. 60A/B: The front/back frame panel structure model (40 foot and 40 foot high cube collapsible container)

COLLAPSIBLE CARGO CONTAINER

Dennis Zhu Ouyang 847-781-5139

Page 157 of 185

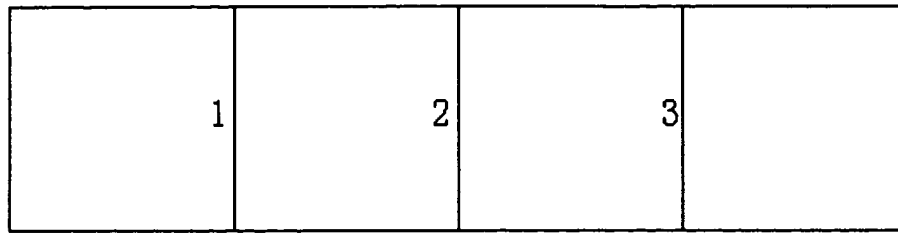


FIG. 61A/B: The modified front/back frame panel structure model with only three vertical columns (40 foot and 40 foot high cube collapsible container)

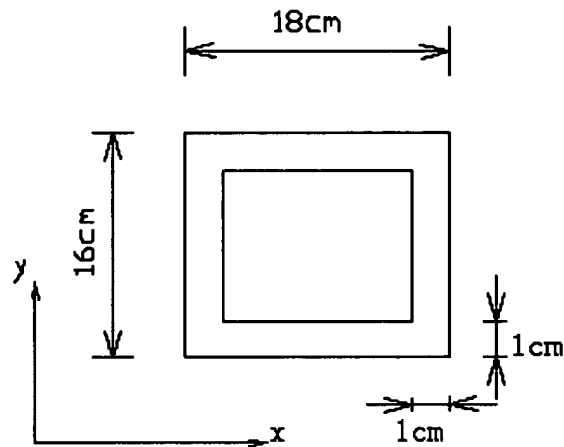


FIG. 62: the left frame vertical column section view

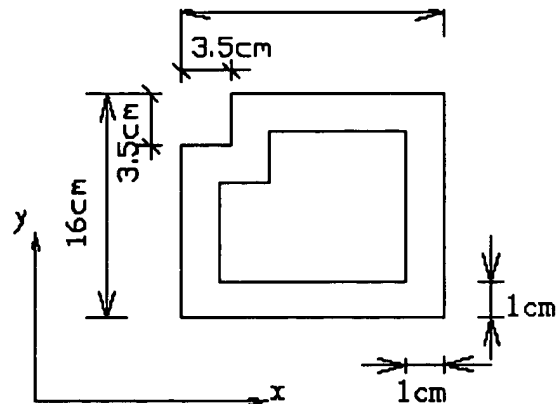


FIG. 63: the right frame vertical column section view